THE MAGIC RING
OF
FRANCIS BACON

WALTER CONRAD ARENSBERG

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BY

WALTER CONRAD ARENSBERG

1712 OLIVER BUILDING
PITTSBURGH, PENNSYLVANIA
1930

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FRANCIS OF VERULAM

REASONED THUS WITH HIMSELF,

AND JUDGED IT TO BE FOR THE INTEREST OF THE PRESENT AND FUTURE GENERATIONS THAT THEY SHOULD BE MADE ACQUAINTED WITH HIS THOUGHTS

. . . . . .

Moreover, because he knew not how long it might be before these things would occur to any one else, judging especially from this, that he has found no man hitherto who has applied his mind to the like, he resolved to publish at once so much as he has been able to complete. The cause of which haste was not ambition for himself, but solicitude for the work; that in case of his death there might remain some outline and project of that which he had conceived, and some evidence likewise of his honest mind and inclination towards the benefit of the human race. Certain it is that all other ambition whatsoever seemed poor in his eyes compared with the work which he had in hand; seeing that the matter at issue is either nothing, or a thing so great that it may well be content with its own merit, without seeking other recompence.

Novum Organum

Translation by Spedding.

THE MAGIC RING OF FRANCIS BACON

Following is a brief description of some of the principal features of a cryptographic structure which I shall call the Magic Ring of Francis Bacon.

In the form of this structure a number of cryptographic spellings, of a fragmentary character, may be discovered at positions corresponding to the stages through which the structure, as a whole, is successively developed; and these fragmentary spellings are the evidence on which I base the hypothesis that the structure as a whole contains, as the ultimate form of its content, a continuous cryptographic spelling which I have not yet been able to decipher.

For my failure to decipher the ultimate spelling embodied in the Magic Ring there are two possible explanations. My definition of the structure may be defective in respect to certain details, and I may have made a defective application of the definition to the cryptographic text.

INFLEXIBLE AND FLEXIBLE STRUCTURES

As distinct from the flexible structures which I have defined in previous publications, the structure of the ultimate spelling in the Magic Ring is inflexible. But it is chiefly in the form of the flexible structures that the clues to the inflexible structure of the Magic Ring are first discoverable. To be noted particularly among these flexible structures are anagrams, acrostics, especially in the form of the extremely flexible structure of the compound anagrammatic acrostic, and the representation of words by numbers, especially in the form of simple value-sums, juxtaposed value-sums, and simple transliterations. The representation, in accordance with the method of simple transliteration, of words by numbers and numbers by words, is of far greater importance than I have previously indicated.

THE SECRET HISTORY

The Magic Ring is the cryptographic equivalent of a ring to which Bacon alludes, *All's Well, that Ends Well,* in the punning form of "Fortunes

butt'ring". In a previous paper, *Francis Bacon, William Butts, and the Pagets of Beaudesert,* I referred to this ring, without understanding its full significance, in connection with a statement of the secret which Bacon makes of the facts of his identity and history. This secret is expressed by Bacon both in the form of allusions and in the form of the flexible cryptographic structures previously defined. The discovery of this secret, as thus expressed, is essential to the discovery of the ultimate form of the Magic Ring.

As expressed by Bacon himself, the secret which he makes of the facts of his identity and history may be summarised as follows. Bacon was the illegitimate son of Sir William Butts, eldest son of Sir William Butts, physician to Henry the Eighth, and Lady Anne Cooke Bacon. As the son of Sir William Butts, he was descended from Edward Prince of Wales, son of Henry the Sixth, who had a son unknown to history by his wife Anne Neville, afterwards Queen of England, as wife of Richard III. This unknown son was born in 1471, the year in which the father died at the battle of Tewkesbury. As descended from Edward Prince of Wales, son of Henry VI, Bacon was the heir of the House of Lancaster and pretender to the throne of England. Though he is reputed to have been childless, Bacon had a son whose identity was concealed by the device of having him adopted into the family of the Pagets of Beaudesert. This son, who is known historically as William Paget, fourth Baron of Beaudesert, was born on the 12th of December, Old Style, 1572, a date for which no historical record is discoverable. His mother was Lady Anne Cooke Bacon, the mother of Francis Bacon, born on the 13th of January, 1527, Old Style. For this date, like the date of the birth of Bacon's son, there exists, so far as I know, no discoverable historical record. In addition to concealing his identity as the illegitimate son of Sir William Butts, as the descendant of Edward Prince of Wales, and as the father of an illegitimate son, Bacon concealed his identity as an author by the device of using for a pseudonym the name of William Shakespeare. The date of Bacon's death, generally supposed to be the 9th of April, Old Style, 1626, was the 5th of May, Old Style, 1631. This, at least, is the day on which Bacon intended to die in accordance with a long prearranged pact, and I have discovered no evidence subsequent to his death that the pact was not fulfilled. Contrary to the supposition that he is buried in St. Michael's Church at St. Albans, Bacon is buried, together with his mother, in the Chapter House of Lichfield Cathedral, at the spot which is marked by the Chapter House chimney and the stain on the Chapter House floor.

THE SYMBOLISM OF REBIRTH

The reunion of Bacon and his mother in the secret grave in the Lichfield Chapter House is to be understood in the light of the symbolism of rebirth, as expressed in the religious mysteries of antiquity, both pagan

and Christian, and as implied in the conversation between Christ and Nicodemus, *John* III. In accordance with this symbolism the rebirth of the son results from his return to the womb of his mother, who, as the original source of life, can give him life again. This return to the mother, who is conceived as divine and who is associated with the matriarchal conception of God as maternal, involves the symbolism of incest.

By a use of the symbolism of rebirth as expressed both in his secret grave and in the secret form of his writings, Bacon intended to express the expectation that he would be reborn. In his expression of this expectation he represents himself and his mother as the divine heads of a religious and philosophical mystery, analogous to the religious mysteries of antiquity, both pagan and Christian.

The knowledge of the mystery which Bacon made of his identity and of his works and which I have designated in earlier publications as the Shakespearean Mystery was committed by Bacon, as a secret to be guarded until the fulfillment of certain prescribed conditions, into the custody of a secret society of which he was the founder. This society, which is designated in early texts as the Fraternitas R. C., is still in existence.

Bacon's use of the symbolism of rebirth involves the following traditional and historical elements:

(1) the myth of the Golden Bough, especially in the form in which the myth is expressed by Virgil;

(2) the Biblical account of the Six Days' Works, as involving the mystery of Creation;

(3) Biblical and legendary accounts of the birth, death, and resurrection of Christ, as involving the mystery of the birth, death, and rebirth of an incarnate God;

(4) Cabalistic speculations, as recorded in the *Zohar*, in which the intellectual and sexual processes are equated;

(5) Biblical, Cabalistic, and legendary accounts of the Ark of the Covenant;

(6) elements derived from astrology, magic, and alchemy;

(7) sixteenth century Second Adventism, in connection with the Protestant Reformation, the publication, in 1539, 1541, and 1549, of the first authorised version of the Bible in English, and the publication, in 1549, of the first edition of the Prayer Book;

(8) calendrical symbolism, especially in connection with the Reformation of the calendar in 1582.

Whether or not the form of rebirth which Bacon expected is to be understood in a literal sense, it is certainly to be understood in the sense that the truth of his identity, as buried in his works, would ultimately, as he

expected and desired, be revived by an act of interpretation. This act of interpretation, which is the form in which Bacon intended his rebirth to be symbolised, involves the discovery of his Magic Ring.

On the proper presentation of the Magic Ring, as discovered by an act of interpretation unaided by the knowledge committed to the Fraternitas R. C. in the form of a secret tradition, the surviving members of this society are required, by the terms of their allegiance to their founder, to publish the secrets which they are at present guarding.

THE MAGIC GAME OF CHESS

In accordance with my present hypothesis, the ultimate form to which the cryptographic structure of the Magic Ring may be reduced is the form of a chess board in which each of the sixty-four cells is occupied by a letter derived by a complicated process from letters in the manifest form of the text, and in which the sixty-four letters, as thus associated with the cells of a chess board, are to be read in the order of the cells covered by the moves of a Knight in the course of a closed, or reentrant, tour. This tour corresponds to a circle in the sense that its first position may be reached from its last position in a single move, so that the Knight may continue in the same path in an endless succession of cycles.

Of closed, or reentrant, Knight's tours there are known to be thirty-one million of a single type, so that the total number of all types is practically incalculable. The problem of discovering the particular tour employed by Bacon is therefore not without its difficulties.

It is my present hypothesis, based on allusions in the manifest form of the text, that the particular Knight's tour employed by Bacon may be defined as follows:

(1) It is a reentrant tour which converts the chess board into a magic square when the cells of the board are numbered respectively by the numbers of the successive positions which the Knight occupies in making the tour. The magic square thus indicated is not, I believe, a pan-diagonal magic square, its magic character being limited to the fact that each of its rows and columns adds up to the identical number 260.

A Knight's tour which creates a magic square of this sort is illustrated in W. W. Rouse Ball's *Mathematical Recreations and Essays,* page 132, as the Jaenisch magic square.

As a result of reflections in its medians and diagonals, a single tour may be placed on the chess board in eight different positions. It is necessary to discover, therefore, not only the particular tour employed by Bacon but also the particular position in which it is employed.

(2) In addition to creating a magic square, the particular closed, or reentrant, Knight's tour which Bacon uses for his cryptographic game of

chess seems to be defined in respect to the number of moves which the Knight, in each of the eight possible positions of the tour, is obliged to make between two fixed cells, Black Queen Bishop 5 and Black King Bishop 3.

The numbers of moves between these two cells in the eight different positions of the Jaenisch magic square seem to correspond to numbers associated, in the form of obscure allusions, with the Baconian Knight's tour; and I am inclined to the hypothesis that the Baconian tour may be identified with the Jaenisch tour in that position in which the number of moves between Black Queen Bishop 5 and Black King Bishop 3 is, in one direction, 15, and, in the other direction, 49.

The two cells, Black Queen Bishop 5 and Black King Bishop 3, which seem to be indicated as the means of defining the course of the Baconian Knight's tour, are first suggested in connection with a preliminary chess board, as the terminals of a Knight's tour which is non-reentrant, or open. In the form in which I have set it up, this preliminary chess board contains several short spellings in which the letters may be read in the order of successive Knight's moves.

An open, or non-reentrant Knight's tour beginning with Black Queen Bishop 5 and ending with Black King Bishop 3 is given in Mason's *Principles of Chess,* page 35.

(3) The spelling which is formed by the letters in the ultimate form of the chess board, as read in the order of the moves of the Knight in his reentrant tour, should begin, I think, either on the Black Queen Bishop 5 or on the Black King Bishop 3.

For the relation between the preliminary and final forms of the cryptographic chess board I have the following hypothesis. In the preliminary form the players are symbolised by the name of Paget, as mother and son; it contains no continuous cryptographic spelling; and the non-existence of a continuous spelling is intended to symbolise the non-existence, in the Paget family, of a continuous descent. In the final form of the chess board the players are symbolised as Edward Prince of Wales, the ancestor of Bacon, and as Bacon's son, who is known to history under the adoptive name of William Paget, fourth Baron of Beaudesert; the chess board itself is symbolised as Lady Bacon; and the existence of a continuous spelling, which I have not discovered, is intended to symbolise the continuous descent in the family which Bacon, as Butts, claimed as his own.

In respect to the general symbolism, the open, or non-reentrant, tour corresponds to the course of ordinary life, which begins with birth and ends with death. The closed, or reentrant, tour corresponds to the cyclical form of divine life, in which death is followed by rebirth. The two players correspond to father (ancestor) and son (descendant); and the chess board corresponds to the mother, through whom, as in the myth of the Golden

Bough, the son may descend to the father, as in Hell, and return again to life, in the form of a rebirth which corresponds to the rebirth of father and son together.

THE MAGIC SQUARE IN DÜRER'S MELENCOLIA

The order in which the letters are originally to be placed on the cryptographic chess board, as distinct from the order in which they are ultimately to be read, is discoverable by a complicated procedure which involves the use of the magic square which appears in the engraving known as the *Melencolia* by Albrecht Dürer. This square, which contains sixteen cells, one-fourth the number in a chess board, is the following:

16	3	2	13
5	10	11	8
9	6	7	12
4	15	14	1

The engraving is signed by the initials of the artist, A. D., together with its date: 1514. This date is reproduced in the magic square by the numbers in the two cells in the middle of the bottom line; and the numbers in the last and first cells of the same line represent the initials of Albrecht Dürer in the form of their numerical equivalents, 1 and 4. What I believe to be the central clue to the symbolism of the *Melencolia*, as intended by Dürer, appears in the fact that the date with which it is doubly marked is the date of the death of Dürer's mother. The fact that Dürer signed this, like so many of his other works, with his initials, A. D., associated with a date, was recognised by Bacon, I further believe, as a punning association of his name, as having the initials of *Anno Domini*, with Time, or Eternity. Among the determinants for Bacon's use of this engraving are the dates of Dürer's birth and death: 1471-1528. 1471 corresponds to the date of the death of Bacon's ancestor, Edward Prince of Wales. 1528 corresponds to the date, New Style, of the birth of Bacon's mother. Thus, in accordance with Bacon's intention, the life of Dürer may be understood to bridge the period of which Bacon makes a mystery in the history of his ancestry.

To be noted in Dürer's magic square is the fact that the left hand digits, read in descending order, are 1594. This fact was one of the determinants for Bacon's use of this square in connection with the complicated symbolism

intended in the date, 1594, of the publication of the first edition of *Lucrece*. An allusion to this symbolism appears in the words of Malvolio: "Soft, and the impressure her *Lucrece*, with which she vses to seale".

In the sense that the letter I, as having the value of 9, may be used to represent the digit 1, so that the date 1514 may be represented as 15I4, this form of representation may be read 1594; so that the representation of the date 1594 may be understood, in accordance with Bacon's intention, not only in the left hand digits, as described above, but also in the date of the composition of the engraving.

Associated, in accordance with Bacon's intention, with the form in which Dürer's magic square represents the date of *Lucrece* in its left hand digits, is the form in which it may be understood to represent the date of Bacon's death, May 5, Old Style, 1631, in the numbers of the top row:

16	3	2	13

The number in the first cell with the number, reversed, in the last cell corresponds to 1631; and the sum of the numbers in the two central cells (3+2=5) corresponds both to the number of the month, in the sense that May is the 5th month of the year, and to the number of the day.

Moreover, the numbers of the first row: 16.3.2.13, may be understood, in accordance with Bacon's intention, to represent the date of his death and the initials of his mother, as Cooke Bacon, just as the numbers of the last row may be understood, in accordance with the intention of Dürer, to represent the date of his mother's death and his own initials, A. D.

The use of Dürer's magic square to indicate the order in which cryptographic letters are to be rearranged is to be followed by an operation by which the order of the cryptographic letters, as thus arranged, is reduced again to the natural series in the following form:

1	5	9	13
2	6	10	14
3	7	11	15
4	8	12	16

In the form of this rearrangement, the first row may be understood to represent 1594 when the digits of the number of the last cell are added

together; so that 1594, as a seal, is impressed on the line which, in the form of the magic square, contains the numbers, as explained above, capable of being understood to represent the date of Bacon's death. The symbolism, as thus suggested, of a seal, represented by a date, placed upon the date of death, is used by Bacon in the structure of the Magic Ring.

The use that Bacon makes of Dürer's magic square is further to be understood in connection with the fact that, shortly after his burial, the body of Dürer was disinterred. An allusion to this fact, as intended to suggest Bacon's wish that his own tomb should eventually be opened, is to be understood in the description, in the *Fama Fraternitatis*, of the opening of the tomb of Christian Rosencreutz. Events in the life of Dürer and the fact that his name signifies a doormaker or carpenter furnish important clues to the symbolism of the life of Christian Rosencreutz as recorded in the *Fama*, the *Confessio*, and the *Chymische Hochzeit Christiani Rosencreutz*, at the end of which, it will be remembered, the hero is reduced to the position of "door keeper".

The influence of Dürer's *Melencolia* is evident in the treatment of the same subject by the "Monogrammist" F. B. and by the "Monogrammist" A. C. It is my belief that these two engravings, which I have reproduced from *Dürer's "Melencolia. I"*, by Panofsky-Saxl, are in some way implicated in the allusions which Bacon makes to the *Melencolia* by Dürer. Of the identity of the Monogrammists F. B. and A. C. little is definitely known.

If I am correct in my hypothesis that Bacon involves allusions to these two engravings with his allusions to the engraving by Dürer, he intends the initials of the Monogrammist F. B. to suggest his own initials, as Francis Bacon, and the initials of the Monogrammist A. C. to suggest the initials of his mother, as Anne Cooke.

An analogous use of the letters FB, as has long been recognised, appears in the initial letters of the first two lines of *Lucrece* and in the first two unindented lines of the *Sonnets*. An analogous use of the letters AC, as I have indicated in an earlier publication, appears in the cut with the so-called light and dark A, page 15, actual count, of the Shakespeare *Folio*. This A is in reality a monogram for AC.

To be remembered, in this connection, is the fact that in the *Fama Fraternitatis*, the first of the original Rosicrucian works, one of the original members of the Fraternity is designated as F. B., "pictor & architectus":

4. Fr.F.B.M.P.A.

The letters M. P. A. stand, in all probability, for *Magister, Pictor, Architectus*.

According to Panofsky-Saxl, the engraving by F. B. is to be dated 1560. This is the year, Old Style, of Bacon's birth.

Moreover, the foreground in this engraving is divided, as on a lower level than the background, into seven columns, running parallel to the lower edge, of straight lines; and this form of division is analogous to Bacon's cryptographic structure, which I have called the Heptadic Pattern, based on consecutive columns of text in groups of seven.

In respect to these two engravings I have two alternative hypotheses which I wish to put to test. Either the Melancholies of F. B. and A. C. were actually, in agreement with the accepted dates, antecedent to the works of Bacon, and were among the original determinants for his use of Dürer's *Melencolia* in connection with allusions to himself and his mother; or else they were first executed either at his direction or by himself, and then associated with an earlier date, just as the entire Rosicrucian history is antedated for the purpose of endowing it with a spurious antiquity. An analogous antedating appears in the history of Freemasonry and in the false dates of a number of the Shakespeare Quartos.

The association of the initials F. B. with the work of a PICTOR, as in the engraving and in the *Fama Fraternitatis,* may conceivably throw light on the cryptic dialogue between the Poet and the Painter in the first scene of *Timon,* the plot of which is certainly, in my opinion, based on Bacon's fall and retirement.

THE CRYPTOGRAPHIC WATCH

Bacon's use of the magic square in Dürer's *Melencolia* is involved in a complicated procedure which corresponds to the use of a watch. An allusion to this procedure appears in the following passage in *The Tempest,* Act II, Scene i:

> *Seb.* Looke, hee's winding vp the watch of his wit,
> By and by it will strike.

The Cryptographic Watch is analogous to an ordinary watch in the sense that it indicates a certain procedure (analogous to the course of time) in terms of a procedure of a different kind (analogous to the movement of the hands of a watch).

In accordance with this analogy, the operations which the decipherer is obliged to perform on the letters in the cryptographic text are indicated by the Cryptographic Watch as corresponding to a set of operations which must first be performed, independently of the particular letters in the cryptographic text, on successive sets, in various orders, of the first seven letters of the alphabet: A, B, C, D, E, F, G. I shall call these letters hereafter the Ephemeral Letters. The various operations which must be performed upon these letters, as corresponding to the various operations which must be per-

formed upon the letters in the cryptographic text in setting up the cryptographic chess board, are indicated in the form of allusions to the various spellings to which, as a result of these operations, the Ephemeral Letters are successively reduced.

OTHER STRUCTURES

The ultimate form of the cryptographic chess board, which is a structure that may possibly be repeated a number of times in succession for the purpose of prolonging the cryptographic spelling, and which is associated, as I have indicated, with a preliminary chess board, Dürer's magic square, and the Cryptographic Watch, is discoverable in the course of a procedure which requires the previous discovery of a number of other cryptographic structures, including the following:

(1) The Setting of a Seal;
(2) The Breaking of a Seal;
(3) The Turning of a Key in a Lock.

The rudimentary form in which the clue to the structure of the Magic Ring is first presented involves a structure which I shall call the Cyclical Index.

THE CRYPTOGRAPHIC JOURNEY

The procedure which results successively in the discovery of the cryptographic structures named is represented in the cryptographic text in the form of a journey which corresponds both to the life of man and to the divine, or universal, life.

With the divine, or universal, life, as a form of life which is identified with human life both in the Incarnation of Christ and in other forms of incarnate deity, Bacon equates himself, as an individual, and the life of his family, as a succession of individuals with whom he may be identified.

The journey of life, thus represented as the form of life in general and as the life of Bacon and his family in particular, is further equated with the course of Time. The sense in which Bacon may thus be understood to use the symbolism of the course of Time in a representation of himself is of fundamental importance in the cryptographic structure of the Magic Ring.

In his representation of the journey of life in the form of the course of Time, Bacon makes use of various traditional forms of the symbolism of birth and rebirth, including the myth of the Golden Bough; the Biblical account of Creation in six days followed by a day of rest; Biblical and legendary accounts of the Ark of the Covenant; Biblical and legendary ac-

counts of the birth, death, resurrection, and second coming of Christ; and the theological doctrine of Adoptianism. In accordance with this use of the symbolism of rebirth, the course of Time is represented as cyclical; and the cryptographic structure of the Magic Ring is based, in the last analysis, on an analogy with the cyclical character of Time as involving rebirth.

In the sense that the successive stages of the cryptographic procedure are only discoverable as a result of the prior discovery of clues presented in succession, the procedure is analogous to the popular game of Treasure Hunt.

CALENDRICAL SYMBOLISM

In his representation of the course of Time, Bacon makes an elaborate use of various forms of a calendar, including in particular a symbolism based on the Gregorian Reformation of the calendar in 1582.

The construction of a calendrical system involves, in general, the correlation of three units which are incommensurable: the solar year, the lunar year, and the day.

The number of days in the solar year is 365+.

The number of days in the lunar year is 354+.

Thus the difference between the solar year and the lunar year is approximately 11 days.

For the purpose of accounting for the fraction of a day in excess of the 365 days in the solar year, so that the beginning of the calendrical year may be maintained in a certain fixed relation to the equinoxes, an extra period must be occasionally intercalated. In the Julian and Gregorian calendars this intercalary period is the Leap Year Day.

In accordance with Bacon's usage, the solar year, as corresponding to the sun, is equated with the divine father; the lunar year, as corresponding to the moon, is equated with the divine mother; and the intercalary period is equated with the divine son.

In primitive calendars there is a lack of uniformity in respect to the length assigned both to the normal year and to the intercalary period, which in some instances was as much as a month. An allusion, in the calendrical symbolism of the Shakespearean works, to the intercalation of a month appears in the form in which the tragedy of *Troylus and Cressida* is included in the *Folio*. The total number of pages of *Troylus and Cressida* is 30, of which 29 are printed. In the form of these numbers, which correspond to the number of days assigned to the alternate months in the Roman calendar, based on the lunar year, inaugurated in 452 B. C., *Troylus and Cressida* is intended to symbolise a month; and the fact that it is intended to symbolise an intercalated month is suggested, first, by its omission from

the list of plays in the *Catalogue*, and, second, by the omission of pagination numbers from all but two of its pages, the grossly misnumbered pages 79 and 80, so that the entire series of its pages is omitted from the regular series of pagination numbers.

Prior to the Gregorian Reformation, the principal system used was the Julian Calendar, which was inaugurated by Julius Caesar. The number of days assigned to the various months by Julius was changed by Augustus Caesar.

THE GREGORIAN REFORMATION

The Gregorian Reformation, inaugurated by Pope Gregory XIII, embodied ideas of Regiomontanus, Lilius, and Clavius. The necessity for a reformation arose from errors in calculating the exact length of the solar and lunar years, so that, as a result of the intercalation of an extra day in every four years, the position of the vernal equinox in the calendar had been shifted, in the course of centuries, from March 21 to March 11, and the new moons which actually fell on the first of the month were marked on the calendar as falling on the fifth.

The Gregorian Reformation was announced in a brief issued in March, 1582.

For the purpose of a more exact adjustment of the calendrical year to the solar year, the intercalation of one day in every four years, as required by the Julian Calendar, was changed to one day in every four years, except in all years of even centuries in which the number of the centuries is not divisible by four.

For the purpose of restoring the vernal equinox to the 21st of March, Gregory directed that the day following the feast of St. Francis, namely the 5th of October, 1582, should be reckoned the 15th of October.

He further directed that the first of the year should be reckoned as the 1st of January, instead of the 25th of March.

Thus the year in which the reformed calendar became effective began on January 1, 1583.

As the result of the suppression of ten days in October, 1582, any date reckoned Old Style is ten days earlier than it is marked New Style.

THE EPHEMERAL LETTERS

All the days in the year are marked successively by the first seven letters of the alphabet, A, B, C, D, E, F, and G, the first day in the year being marked A, the seventh G, the eighth A again, etc.

The Dominical Letter for any year is the letter which corresponds, in accordance with this method of designating the days of the year, to Sunday.

As I have already suggested, the seven letters thus used may be designated as the Ephemeral Letters.

THE DIONYSIAN AND JULIAN PERIODS

Important for the interpretation of the calendrical symbolism employed by Bacon are the Dionysian, or Great Paschal Period and the Julian Period.

In the *Encyclopedia Britannica* the Dionysian, or Great Paschal Period is defined as follows:

"The cycle of the sun brings back the days of the month to the same day of the week; the lunar cycle restores the new moons to the same day of the month; therefore 28x19=532 years, includes all the variations in respect of the new moons and the dominical letters, and is consequently a period after which the new moons again occur on the same day of the month and the same day of the week. This is called the *Dionysian* or Great *Paschal Period,* from its having been employed by Dionysius Exiguus, familiarly styled "Denys the Little", in determining Easter Sunday. It was, however, first proposed by Victorius of Aquitain, who had been appointed by Pope Hilary to revise and correct the church calendar. Hence it is also called the *Victorian Period.* It continued in use till the Georgian reformation."

The Julian Period is thus defined:

"The Julian period, proposed by the celebrated Joseph Scaliger as an universal measure of chronology, is formed by taking the continued product of the three cycles of the sun, of the moon, and of the indiction, and is consequently 28x19x15=7980 years. In the course of this long period no two years can be expressed by the same numbers in all the three cycles. Hence, when the number of any proposed year in each of the cycles is known, its number in the Julian period can be determined by the resolution of a very simple problem of the indeterminate analysis. It is unnecessary, however, in the present case to exhibit the general solution of the problem, because when the number in the period corresponding to any one year in the era has been ascertained, it is easy to establish the correspondence for all other years, without having again recourse to the direct solution of the problem. We shall therefore find the number of the Julian period corresponding to the first of our era."

In the sense that these periods may be understood to bring back identical sets of calendrical relations, they are used by Bacon as symbols of the period intervening between birth and rebirth. A typographical allusion to the Julian Period appears in the numbers of the two grossly misnumbered pages of *Troylus and Cressida,* 79 and 80. These numbers,

read together as 7980, are intended to suggest the Julian Period in the form of the number of years which the Julian Period comprises.

THE TEN OMITTED DAYS

Fundamental in the cryptographic structure employed by Bacon is the use that he makes of the days which were suppressed, by the Gregorian edict, in October, 1582, when the day following October 4th was reckoned October 15th.

As a result of this omission, the number of days in 1582 was only 355.

As a further result of this omission, the order of the Ephemeral Letters was altered. Thus October 4th was followed by a day whose Ephemeral Letter should properly have belonged to a day ten days later, and since the days are lettered by successive groups of seven letters, this letter would have been the fourth after the letter for October 4th, instead of the first thereafter.

The transposition of the Ephemeral Letters which may thus be assigned to the omission of ten days in October, 1582, is the first clue to the various transpositions of letters in the cryptographic alphabets which Bacon employs.

Since the suppression of ten days in October, 1582, had for its purpose an adjustment of the calendrical year to the solar year, the cryptographic transpositions which Bacon bases on the resulting transpositions of the Ephemeral Letters are to be understood as having an analogy with the form in which the Georgian Reformation involved an adjustment to the sun.

LUNAR ADJUSTMENT

Just as the Gregorian Reformation involved an adjustment to the sun, it involved an adjustment to the moon, since it corrected the form in which the Julian Calendar recorded new moons which actually fell on the first of the month as falling on the fifth. This adjustment to the moon, as well as the adjustment to the sun, is paralleled by Bacon in the form of transpositions in his cryptographic alphabets.

THE YEAR AS 360 DAYS

In addition to employing the symbolism of the Gregorian Reformation of the calendar, Bacon employs the symbolism of a calendar which is still further reformed. This further reformation involves the representation of the year as having, not 365, but 360 days, so that the number of days in the year is identical with the number of degrees in a circle, and the year may be identified with the circle in accordance with the general symbolism of the cyclical character of Time and the Magic Ring.

DESIGNATION OF DAYS BY NUMBERS

In accordance with Bacon's usage, days of the year may be designated by the numbers of their positions in the annual series of days, as calculated either Old Style, in which the year begins March 25, or New Style, in which the year begins January 1.

The numbers by which days may thus be designated may be counted either from the beginning or from the end of the year; and they may be understood as the spellings to which the numbers correspond by the method of simple transliteration.

In the form in which he associates the symbolism of rebirth with his calendrical symbolism, Bacon equates a period of pregnancy with the number of days from the Annunciation, March 25, to Christmas.

THE DIVINE WEEK

As symbolising the course of Time, the cryptographic journey is represented as including, subsequent to a representation of the life on earth, a period which extends from death to the reunion (and identification) of the soul with God. This period is represented as seven years, in which the seven years correspond to the six days of Creation plus the day of rest after the work of Creation was completed. The sense in which the year, as a unit, is thus equated with a divine day is of profound importance for the discovery of the final form of the cryptographic structure. In accordance with this equating of the year, as a unit, with a divine day, the six days of Creation plus the following day of rest correspond to a divine week of years.

In the form in which the divine week of years is first represented in the cryptographic journey, it is included with the representation of the life on earth as a part of the general course of Time, as if recorded Time were reckoned from the beginning, rather than from the end, of the divine week of Creation. This initial inclusion of the first divine week of creation in the general representation of the course of Time is subsequently abandoned for a representation of Time as reckoned from the end, rather than from the beginning, of the divine week of Creation.

As a result of equating the year, as a unit, with a divine day, and the divine week of Creation with a week of years, the initial cryptographic unit, as corresponding to a year, is eventually transformed into the unit of a week. This transformation involves the representation of the year, as a unit, in a series of different forms. The first form is 521, which corresponds, by simple transliteration, to the letters EBA, a spelling intended to be suggested by the cryptic reference to "Ab spelled backward", in which the "speld" form of A

may be understood to be A and the "speld" form of B may be understood to be BE. The first form of representing a year, as 521, is altered into the number 419 as a result of alphabetical substitutions based on the transpositions of the Ephemeral Letters in 1582. From the use of 419, as representing a year, Bacon eventually evolves, in connection (a) with a use of the number 385, as the expression of certain temporal and literal correspondences, and (b) with the numbers 365 and 360 as corresponding to the number of days in the actual year and in the circular year, a pattern which represents a week and which I shall call the Heptadic Pattern, to be defined later.

In the sense in which it is employed by Bacon, the number 385 is intended to signify, by transliteration, the spelling CHE, as KEY; and also, as a palindrome, the last three digits of the date of the Gregorian Reformation: 1583.

Allusions to the period of six years appear in the form of allusions to the meaning of the spelling into which 2191, the number of days which the period contains, may be transliterated: BAIA.

Allusions to the period of seven years appear in the form of allusions to the meaning of the spelling into which 2556, the number of days which the period contains, may be transliterated: BEEF.

Since the Leap Year Day is the 29th of February every fourth year, the serial number of this day in the period of four years is 1155; and allusions to the Leap Year Day appear in the form of allusions to the meaning of the spelling into which its serial number may be transliterated, either directly or as a palindrome: LEE or EEL.

Other allusions to the Leap Year Day appear in the form of allusions to the meaning of the spelling into which 1155 may be transliterated as APE, which is a spelling which may also be read, by cyclic permutation: PEA.

In the construction of the ultimate form of the chess board, the Heptadic Pattern is used, in accordance with an extremely complicated procedure which involves the Cryptographic Watch and Dürer's magic square, (1) in four different orientations, the normal, and three others obtained from the normal by inversion, reflection, and rotation; and (2) in three different positions which I shall designate respectively, in accordance with the Ephemeral Letter with which each may be understood to begin, the A position, the E position, and the G position. The A and G positions correspond respectively to the two chess players, as corresponding to the father (or forefather) and the son (or descendant), and the E position corresponds to the chess board, as corresponding to the mother.

By each use of the Heptadic Pattern in each position in each orientation, ten letters are selected from seven consecutive columns, as corresponding to a week; and these ten letters are reduced, first, to seven letters, as corresponding to the number of days in a week, and, second, to four letters.

Since the Heptadic Pattern is thus used in each orientation in each of three patterns it yields three tetrads of four letters each, which are reduced to a single tetrad of four letters by a complicated procedure which is to be understood as corresponding to the action of the players. This tetrad of four letters is assigned to four consecutive cells of the chess board. And since the three positions are used together in each of the four orientations, 4×4, or 16 letters are obtained from each consecutive series of seven columns, as corresponding to a week, and the 64 letters required for the 64 cells of the complete chess board are obtained from 4×7, or 28 columns, as corresponding to four weeks.

THE CRYPTOGRAPHIC TEXT

The text which embodies the Magic Ring consists of two separate works which are so constructed, in respect to their cryptographic content, as to constitute a single work. These two works are the first Shakespeare *Folio*, 1623, and the English form, published in 1640 and attributed to Gilbert Wats, of *The Advancement and Proficience of Learning*.

For the purpose of cryptographic reference, Bacon associates the publication of the 1640 *Advancement and Proficience of Learning* with March 20, New Style.

In the sense that the cryptographic text is composed of two separate units, it may be called the Dyadic Text.

As the text which embodies the cryptographic structure of the Magic Ring, the Dyadic Text is to be considered, first, in respect to the original order of its contents, and, second, in respect to an order in which the contents are rearranged.

REARRANGEMENT OF THE CRYPTOGRAPHIC TEXT

The original order of the cryptographic text is the text of the first Shakespeare *Folio* as published, followed by the text of the 1640 *Advancement and Proficience of Learning* as published.

The rearrangement involves only the text of the *Folio*, which, considered as preceding the text of the *Advancement*, is rearranged as follows:

(a) Prefatory Matter.

(b) The Plays which had previously been published in quartos and which, since they were so published before the death of the reputed author, I shall call the Pre-mortem Plays.

(c) The Plays which were first published in the first *Folio* and which, since they were so published after the death of the reputed author, I shall call the Post-mortem Plays.

The Pre-mortem plays, in the order of their appearance in the *Folio,* are:

The Merry Wives of Windsor,
Much Ado about Nothing,
Love's Labour's Lost,
A Midsummer-Night's Dream,
The Merchant of Venice,
Richard II,
Henry IV, Part I,
Henry IV, Part II,
Henry V,
Richard III,
Troilus and Cressida,
Titus Andronicus,
Romeo and Juliet,
Hamlet, Prince of Denmark,
King Lear,
Othello, the Moor of Venice.

The Post-mortem plays, in the order of their appearance in the *Folio,* are:

The Tempest,
The Two Gentlemen of Verona,
Measure for Measure,
The Comedy of Errors,
As You Like It,
The Taming of the Shrew,
All's Well that Ends Well,
Twelfth-Night; or, What You Will,
The Winter's Tale,
King John,
Henry VI, Part I,
Henry VI, Part II,
Henry VI, Part III,
Henry VIII,
Coriolanus,
Timon of Athens,
Julius Caesar,
Macbeth,
Anthony and Cleopatra,
Cymbeline.

As thus rearranged, the total contents of the cryptographic text must be counted in respect to the total number of pages, the total number of printed pages, the total number of columns, and the total number of columns in the various sections into which the total text is subdivided in respect to subject matter.

The Grand Total of columns in the cryptographic text is 2414.

Reduced to the number of their columns, the following sections, as of particular importance, may be here designated:

(1) The Diminished Grand Total: 2401 columns.
(2) Signature Section: 2396 columns.
(3) Golden Section: 2324 columns, or 1417 pages.
(4) Absolute Calendar: 2191 columns.
(5) The BACE Calendar: 2135 columns.

In the Absolute Calendar the number of columns corresponds to the number of days in six years, as comprising an extra day for a Leap Year. The use of this calendrical number involves the symbolism of six years as corresponding to the six days of creation and as implying the existence of an extra day which is not counted, in an analogy with the day of rest by which the days of the divine works were followed.

Unlike the other sections which I have designated and which are respectively constant in respect both to number of columns and to relative position in the text as a whole, the BACE Calendar, as a section of 2135 consecutive columns, appears, in relation to the total text, in different positions.

THE ABSOLUTE CALENDAR

The 2191 columns of the Absolute Calendar are the columns remaining after the following deductions have been made from the Grand Total.

From the Shakespeare *Folio* deduct:

(a) Prefatory Matter;
(b) Total text of *Troylus and Cressida;*
(c) All remaining columns in which no portions of the text of the plays proper are included: the *Actors' Names* for *Henry the Fourth,* the *Epilogue* to *Henry the Fourth,* and the *Actors' Names* for *Timon.* The *Prologue* to *Troylus and Cressida* is already excluded by the exclusion of the total text of that play;
(d) The first thirteen columns of *The Merry Wiues of Windsor.*

From *The Advancement and Proficience of Learning* deduct all text extraneous to the text proper, as including only the nine books into which *The Advancement and Proficience of Learning* is divided.

In respect to their calendrical symbolism, all excluded portions are to be considered as analogous to intercalary periods.

With the exception of a single page, all the printed pages of the two works are divided into either one or two columns. The single exception is the *Actors' Names* of *Henry the Fourth,* which is divided, in a highly significant form intended to symbolise a Trinity, into three columns.

In *The Advancement and Proficience of Learning* the page numbered 300 is to be counted as containing two columns, for though it is printed as

for a single column at the top, it is divided into two columns at the bottom. The form of this page, like the form of the *Actors' Names* of *Henry the Fourth*, is highly significant for the calendrical symbolism, the second column in each instance corresponding to the symbolism of the Leap Year Day.

The form of the Absolute Calendar, as well as the form of the other main divisions, is to be considered as cyclical, so that the first column may be considered as following the last column, and any number, as corresponding to any number of columns, may be counted, by cyclical permutation, either forward or backward.

The Absolute Calendar, in combination with a complicated use of the Bace Calendar, is used by Bacon for the purpose of recording dates, in the past and in the future, which relate to the history of his family, his own history, and his symbolism of rebirth.

In accordance with his use of the Absolute Calendar and the Bace Calendar, Bacon makes use of a number as representing a year. This number is 419, which is formed as follows: 54 + 365, the number of days in a year. This number is used for any year not a Leap Year, for which the number used is 420, which is formed as follows: 54 + 366, the number of days in a Leap Year.

2191, the number of columns in the Absolute Calendar, is the number of days, as including a single Leap Year Day, in six years, considered as symbolising the first six days of the divine week of Creation. The Leap Year Day corresponds to the second column of the exceptional page marked 300 in *The Advancement;* and in the sense that this page may be considered, by virtue of the form in which it is printed at the top, as containing either two columns or a single column, the total number of columns, as corresponding to the total number of days in six years, may be considered either 2191, as with a column for the Leap Year Day, or 2190, as without such a column.

THE WHEEL

The structure of the Magic Ring, in each of its successive phases, is based on the principle of a wheel-cipher, in which the wheel corresponds to the cryptographic text, considered either as to its entirety or as to any of the sections mentioned above.

In the sense that the cryptographic text corresponds to a wheel, the first page or column (as the case may be) is considered as following the last by cyclic permutation; so that any number of units (pages or columns) may be counted from a given unit, by cyclic permutation, either forward or backward.

The circumference of the wheel may be considered as expressed by the number of the units (pages or columns) which it comprises.

When the wheel is considered in respect to the number of pages, this number may be either (1) the True Total, or (2) the False Total, which is based on pagination numbers, whether true or false. Thus the first Shakespeare *Folio* has a true total of 908 pages; and a false total of 1528 pages, obtained as the sum of the last pagination numbers (303 + 232 + 993) of the three paginated series, *Comedies, Histories,* and *Tragedies.*

THE CYCLICAL INDEX

By the use of this wheel, a cyclical index of a text is formed as follows: Key-words of superlative importance, such as the names of Francis Bacon and his mother, Anne Cooke or Anne Bacon, are embodied in the text on pages (considered as unit segments of the circumference of the wheel) whose relative positions correspond to key-numbers by which the key-words may be represented, either (1) by methods of numerical representation defined in my earlier publications, or (2) by dates with which the key-words have important associations, such as birth and death dates.

The counts intended to establish a correspondence between the number of a page containing a key-word and the key-number by which the key-word may be represented are begun either (a) at the beginning of the book, or (b) at a page which is indicated by the fact of containing a second key-word with which the first key-word is either identical or intimately associated. Thus a count which is intended to indicate a correspondence between the number of a page containing the word BACON and a key-number by which the key-word may be represented, either as BACON or as FRANCIS BACON, may be begun either on the first page of the book or on a page containing another instance of the word BACON or on a page containing the word FRANCIS.

The elementary form in which I first noted the intention to create a correspondence between a key-number and the number of a page containing a corresponding key-word is briefly discussed in *The Shakespearean Mystery.*

THE INDEX INTERVAL

When the key-number with which a page containing a key-word is to be identified is larger than the total number of pages in the book, the number of the page is conveniently discoverable (1) by dividing the key-number by the total number of pages, and (2) by adding the remainder to the number of the page at which the count begins.

The quotient of this act of division represents the number of complete revolutions through which the key-number passes around the wheel, and the remainder represents the interval between the beginning of the count and the end of the count as it appears within the limits of a single revolution. This

interval, whether derived from a key-number which is greater or less than the total number of pages, I shall call hereafter the Index Interval.

When the total number of pages is considered as a False Total which is greater than the True Total, the remainder that results from the division of the key-number by the False Total may be greater than the True Total, and this remainder must then, for the purpose of finding the Index Interval, be divided by the True Total.

In addition to his use of key-numbers derived from dates and from numerical representations of the names of individuals, Bacon makes an important use of a key-number derived as the product of the number representing his name as FRANCIS BACON, 6733, and the number representing the name of his mother, as ANNE BACON, 3233. This act of multiplication of the number-name of Francis Bacon by the number-name of Anne Bacon is intended to involve the symbolism of an act of procreation, in accordance with the sense of multiplying used in the Bible; it is intended accordingly to suggest (1) the incest symbolism involved in the symbolism of rebirth as defined in *The Shakespearean Mystery*, and (2) the birth of a son with whom the father identifies himself. The hint that the decipherer is to perform this act of multiplication as the means of discovering a key-number by which to establish the identity of the son, as William Butts, is given, *inter alia*, on the pages numbered 10 and 11 in *The Tempest*, with their references to multipying the mistress; to *logs*, as involving the sense of Logos, logarithm, and calendrical record; and to *But*.

As used for the purpose of the Cyclical Index in the Shakespeare *Folio*, the product of 6733 by 3233, or 21,767,789, is used as a key-number for the Cyclical Index as involving the False Total 1528. 21,767,789 divided by 1528 = 14,245, with a remainder of 1429. Since this remainder is greater than the True Total, 908, it is divided by the True Total, being so divisible one time, with a remainder of 521. 521 is accordingly the Index Interval.

The same number 521, as thus obtained as an Index Interval in connection with the Cyclical Index in the *Folio*, appears as a key-number involving the symbolism of the solar year in connection with the Baconian Calendar.

EXAMPLES

The use of the Cyclical Index may be illustrated as follows:

(1) Shakespeare *Folio*, Wheel: 1528, False Total. Key-number: 1561, date, New Style, of birth of Bacon. Index Interval: 33. Beginning with page numbered 1 in a count of the pages included in the three series with the false total 1528, the Cyclical Index points page 33, value-sum of BACON, with confirmatory acrostics and allusions.

(2) Shakespeare *Folio*, Wheel: 1528, False Total. Key-number: 6733, juxtaposed value-sum of FRANCIS BACON. Index Interval: 621. Counting from page 71 (page 53 of *The Merry Wiues of Windsor*) with the first appearance of the word "Bacon" in the *Folio*, 621 points page 692, with the last appearance in the *Folio* of the name FRANCIS.

(3) Shakespeare *Folio*, Wheel: 908, True Total. Key-number: 6733, juxtaposed value-sum of FRANCIS BACON. Index Interval: 377. (a) Counting from the first page, inclusive, the Index Interval 377 points page 377, with the unique expression "Ecce signum", to be understood in the light of contextual allusions and acrostics. (b) Counting from page 71, with the first appearance of "Bacon", the Index Interval 377 points page 448, with its unusual designation of a speaker as "France" (pun for Francis), to be understood in the light of contextual allusions.

AB SPELD BACKWARD

An important expression of the calendrical symbolism of the Magic Ring is to be understood in the cryptic question, *Loues Labour's lost:*

What is Ab speld backward with the horn on his head?

This question is to be answered in the light of its context, which includes a reference to "the Horne-booke" and the two cryptic statements:

(1) thou are not so long by the head as honorificabilitudinitatibus.

(2) Ba, *puericia* with a horne added.

For the answer to the question: "What is Ab speld backward?", it is necessary, first, to represent the letters A and B by their "speld" forms: A and BE; and, second, as corresponding to their "speld backward" form, to write them as a palindrome: EBA.

In the form of EBA, "Ab speld backward with the horn on his head" combines an allusion to the tide as ebb (EBA) and "head" tide; and this allusion to Tide is to be understood as an allusion to Time in the sense in which Tide and Time are synonymous. The allusion to Time, as thus suggested, is confirmed by the word "horn", which refers to Time in the sense that HORN = CORNUS = POLE STAR = POLE = REVOLUTION OF THE HEAVENS = TIME. In the light of the significance of HORN as TIME, "the Horne-booke" is to be understood as an allusion to a CALENDAR.

The allusion, as thus defined, to a calendar, is intended to be understood to refer to a particular calendrical period, which is designated by the number 287, which appears as the value-sum of the freak word HONORIFICABILITUDINITATIBUS. 287 is the number of October 14 in the annual series of days; the special significance of this number is the fact that it is the number of the day, New Style, corresponding to October 4, Old Style, which, as the day of

St. Francis, was designated by Pope Gregory as the day to precede the calendrical reformation by the omission of ten days from the calendrical count.

Another allusion to the calendrical Reformation in 1582 involves the sense in which AB may be understood as the Hebrew name of a month. Thus understood, "Ab speld backward" may further be understood, in the form BA, to indicate 21, as the number of days which the month contains. The only such month was October, 1582, when the number of days was reduced from 31 to 21 by the omission of ten days, as required by the Gregorian Reformation.

As a result of this omission, the total number of days in 1582 was 355, a number which may be transliterated CEE. Some of the cryptic allusions to this year, as CEE, take the punning forms of SEE, SEA, and KEY. Another allusion to the same year is based on the form to which CEE, as representing the 355 days of 1582, may be read by cyclic permutation ECE, as a pun for ECCE. This pun is intended, in the Shakespeare *Folio*, in the cryptic reference to *Ecce signum* on page 377, actual count, where the number 377 is to be understood as 100 (value-sum of FRANCIS BACON) plus 277, the number of October 4, the Feast of St. Francis, as the day from which the Gregorian Reformation is reckoned.

The letters "Ab speld backward" may be also understood to refer to two Dominical Letters in a single year, when they refer to a Leap Year in which the first Dominical Letter A is followed by a second Dominical Letter B.

The sense in which EBA may be understood to represent Time appears in the form in which the letters of the spelling may be represented by their numerical equivalents: 521. This number is intended to represent an ordinary year, as containing 52 weeks and 1 day, in the sense that the first two digits (52) may be identified with the number of weeks in a year and the last digit (1) may be identified with the one day which a year contains in excess of the number of full weeks.

In the sense that 521 is intended thus to represent an ordinary Solar Year by the number of its days, a Leap Year would correspond to 522; and a Lunar Year, as eleven days shorter than a Solar Year, would correspond to 510, a number which may be transliterated, as a palindrome: KE (KEY).

The most important use of the key-number 521 to represent the period of a year appears in the Signature Section, of 2396 columns.

After a preliminary use of the number 521 to represent a year, the number 419 is used in its place. A hint of this form of representation appears in the answer which is made to the cryptic question by the Pedant:

Ba, *puericia* with a horne added.

In accordance with this answer, the representation of a year by 521 (EBA) is to be used with another form of representation of the same period;

and this form of representation is described as a HORNE (YEAR) to which the decipherer must ADD ED ("added").

In the sense that a YEAR (HORNE) = 365, the number of days in a solar year; and in the sense that the letters to be added: ED, may be transliterated as the number 54, the alternative form which the Pedant suggests for the representation of a year is 365 + 54 = 419.

ED, as the letters to be added to 365, are to be understood as a pun for HEAD, as alluding to HEAD TIDE; so that 419 corresponds to a form of year with the tide at its height.

As contrasted with the number 419 as representing the year at head (ED) tide is the number 417 as representing the year at ebb tide. In this form of representation EBB is represented by the spelling EB, which may be transliterated 52, so that 365 + 52 = 417.

419 may be transliterated DAI (DAY); 417 may be transliterated DAG; and the two numbers, as will be explained later, are used together.

As a palindrome, 419 may be transliterated IO; and, as a palindrome, 417 may be transliterated either GAD or GO.

In addition to referring to a form of year at head tide, the number 419 is to be understood to refer to a year as prefixed by the name of a king: ED. for EDWARD, in accordance with the common practice of designating a year by its number in the reign of the contemporary king or queen.

The Edward suggested by the use of ED in the representation of a year by the number 419 is either Edward Prince of Wales, son of Henry VI, or Bacon himself, in the sense that Edward may possibly have been his given name.

The number 419, together with the number 417, is used to indicate a succession of exact dates as corresponding to columns of the cryptographic text. For this use of the number it is necessary first to identify a particular column as corresponding to a particular date from which the other dates are to be reckoned. The column thus identified is column 1 of the page numbered 290 of *The Winter's Tale;* this column is numbered 365 in the Post-mortem Plays; and the date with which it is identified is December 31, 1582, as corresponding to the day immediately preceding the inauguration of the Reformed Calendar.

In accordance with the use of 419, together with 417, to represent the period of a year, as calculated from column 365 of the Post-mortem Plays as corresponding to December 31, 1582, the number of the column corresponding to any date thereafter is obtained by a method of addition (counting forward); and the number of the column corresponding to any date before is obtained by a method of subtraction (counting backward).

The sections in which the number 419, together with the number 417, is used to represent the period of a year are the Absolute Calendar Section,

of 2191 columns, and the BACE Section, of 2135 columns. When the number obtained by the process of addition is greater than the number of columns contained in the section used, or when the number obtained by subtraction is less than 1, the actual number of the column corresponding to the date in question is determined by the method of cyclic permutation.

For the number of the column corresponding to any date after December 31, 1582, add to the number of column 365 of the Post-mortem Plays, as corresponding to the end of the Old Style Period, first, for each full year or fraction thereof, the number 54, as corresponding, not to a date but to the spelling ED; and, second, the exact number of days intervening between the date from which the reckoning is made and the date in question. The number thus obtained is the number of the column corresponding to the date in question, as at ED (head) tide.

The number of the column corresponding to the same date, as at EB tide, is two less, the difference between 54 (ED) and 52 (EB).

For the number of the column corresponding to any date before December 31, 1582, the process of addition is replaced by the corresponding process of subtraction.

In the sense that every date may thus be represented, by the simultaneous use of 419 and 417, as at ED tide and as at EB tide, each date may be represented as corresponding to two columns with a single column intervening. The three columns which thus appear in the representation of a single day give the clue eventually to a form of pattern which I shall call Triadic.

In the sense that the spelled form of Ab, as ABE, may be transliterated 125, it may be understood to refer to the date of Bacon's death, May 5, Old Style, which is the 125th day of the year.

125, considered as the form in which AB may be understood to refer to May 5, may also be transliterated ME, and "speld backward" as EM, the spelled form of the name of the letter M. In the "Ab speld backward" scene, a use of the letter M to suggest May 5 appears in the phrase: "I maruell thy M. hath not eaten thee for a word". The use of the spelling ME to suggest the same date appears, in the same scene, in the following phrase: "Lend me your Horne to make one".

Other allusions to the day of Bacon's death, as May 15, New Style, which is the 135th day of the year, appear in the form of the spellings into which 135 may be transliterated as ACE and NE. In the "Ab speld backward" scene, the use of the spelling NE to suggest May 15, as the 135th day of the year, is intended in two expressions: (1) "neigh abreuiated ne"; and (2) "*ne inteligis domine*".

The use of the spelling ACE to suggest May 15, New Style, as the date of Bacon's death, is intended in the following passage, *A Midsommer Nights Dreame*, Act V, Scene i:

Now am I dead, now am I fled, my soule is in the sky,
Tongue lose thy light, Moone take thy flight,
Now dye, dye, dye, dye, dye.

Dem. No Die, but an ace for him; for he is but one.

Lis. Lesse then an ace man. For he is dead, he is nothing.

Du. With the helpe of a Surgeon, he might yet recouer, and proue an Asse.

Dut. How chance Moone-shine is gone before?
Thisby comes backe, and findes her Louer.

The reference to the departure of *Moone-shine* is an allusion to the eclipse of the moon on May 15, New Style, 1631, the year of Bacon's death. The reference to a *Surgeon,* which is immediately followed by an acrostic spelling BUTS, is intended to suggest the true name of Bacon as the name of the physician of Henry VIII. Further to be noted is the fact that the use of the spelling ACE to suggest the date of Bacon's death appears in a passage which is spoken at a tomb and which includes the word *videlicit.* In this word, as in the spellings of *fidelicet* in the first scene of *The Merry Wiues of Windsor,* the syllables LICIT are intended to suggest the place of burial as Lichfield, in accordance with early spellings of Lichfield (by Bede) as *Licet* and *Licitfeld.*

The spelling EB, which I have already discussed in connection with the expression "Ab speld backward" and which may be transliterated 52, may also be understood to refer to May 15, as the day of Bacon's death, in the sense that May 15 is the 52nd day in the Old Style year.

When "Ab" is understood to refer to May 5, as the day of Bacon's death, the expression "Ab speld backward" is to be understood to imply that Bacon is to be spelled back, as by incantation, to the time of his death in accordance with a sense that involves rebirth.

CRYPTOGRAPHIC ALPHABETS

At successive stages of the cryptographic journey Bacon makes use of different cryptographic alphabets.

The alphabet with which he begins is the form given in *The Advancement* in the section on *Cyphars.* This alphabet, which contains 24 letters, is derived from the 26 letter alphabet by equating I and J, and U and V.

This alphabet of 24 letters is the basis of those forms of representing letters by numbers and numbers by letters which I have already described in the present and previous publications.

In addition to the alphabet of 24 letters Bacon makes use (a) of an alphabet of 21 letters, and (b) of an alphabet of 20 letters.

The alphabet of 21 letters differs from the alphabet of 24 letters by the omission of X, Y, Z.

The alphabet of 20 letters differs from the alphabet of 21 letters by the omission of W, which may be represented as a double U or a double V (UU or VV).

TRANSPOSITIONS OF THE 21 LETTER ALPHABET

Transpositions of the 21 letter alphabet are based on an analogy with the transposition of the Ephemeral Letters in the Gregorian Reformation. This transposition of the Ephemeral Letters resulted from the omission of ten days in October, 1582, when the day after October 4, which would normally have been October 5, was called October 15.

The normal association of the Ephemeral Letters with the period extending from October 1 to October 15 is the following: Oct. 1 = A; Oct. 2 = B; Oct. 3 = C; Oct. 4 = D; Oct. 5 = E; Oct. 6 = F; Oct. 7 = G; Oct. 8 = A; Oct. 9 = B; Oct. 10 = C; Oct. 11 = D; Oct. 12 = E; Oct. 13 = F; Oct. 14 = G; Oct. 15 = A.

Thus the normal sequence of the Ephemeral Letters for October 4 and the day following, considered as October 5, = DE.

In 1582, however, the sequence of the Ephemeral Letters for October 4 and the day following, which was then considered as October 15, = DA.

This transposition from E Old Style, to A, New Style, is a forward transposition of ten, by cyclic permutation, in a series of the seven Ephemeral Letters.

As a result of this transposition, the seven Ephemeral Letters

A, B, C, D, E, F, G, Old Style, become
D, E, F, G, A, B, C, New Style.

And the seven Ephemeral Letters

A, B, C, D, E, F, G, New Style, become
E, F, G, A, B, C, D, Old Style.

In either direction, a transposition of ten, by cyclic permutation, in a series of seven letters is equivalent to a transposition of three in the same direction.

In transposing the letters of his 21 letter alphabet in an analogy with the transpositions of the Ephemeral Letters involved in the change from Old Style to New Style, Bacon first divides this alphabet into two parts, the first part containing the first seven letters, which are identical with the Ephemeral Letters; and the second part containing the remaining fourteen letters, a number which is a multiple of seven.

Each of these parts, considered as a separate series, is, first, transposed three forward; and, second, transposed three backward. The transposition by three is to be understood to correspond to the number to which the transposition of ten is reduced in a cyclical series of seven. The two resulting alphabets appear as follows:

A B C D E F G H I K L M N O P Q R S T U W, Old Style
d e f g a b c l m n o p q r s t u w h i k, New Style
A B C D E F G H I K L M N O P Q R S T U W, New Style
e f g a b c d t u w h i k l m n o p q r s, Old Style

The omission of ten days in October, 1582, was required in bring the sun back into the position among the days of the year that he occupied 1250 years earlier. An analogous adjustment was required to restore the moon to her original position, except that in her case the shift was one of four days instead of ten. Hence, applying an analogous transposition to the letters of the alphabet, in the two groups of seven and fourteen letters respectively, first, of four backward, and second, of four forward, the two resulting alphabets appear as follows:

A B C D E F G H I K L M N O P Q R S T U W
d e f g a b c s t u w h i k l m n o p q r
A B C D E F G H I K L M N O P Q R S T U W
e f g a b c d m n o p q r s t u w h i k l

The transposition of the letters of the alphabet three forward, which may be regarded as analogous to the solar adjustment of ten days as applied to a group of seven letters, combined with the transposition of the letters four backward, which may be regarded as analogous to the lunar adjustment of four days, gives a resultant transposition of the letters of the alphabet one backward. Reversing the direction of the solar and the lunar transpositions gives a resultant transposition of the letters of the alphabet one forward. The two resulting alphabets appear as follows:

A B C D E F G H I K L M N O P Q R S T U W
g a b c d e f w h i k l m n o p q r s t u
A B C D E F G H I K L M N O P Q R S T U W
b c d e f g a i k l m n o p q r s t u w h

In addition to these and other transpositions of an analogous character, the various alphabets obtained may be palindromed and complemented in a variety of ways.

MATHEMATICAL OPERATIONS

A second general type of operation by which Bacon secures cryptographic alphabets may be described as the performance of the various fundamental operations of arithmetic upon the letters of the alphabet con-

sidered as the numbers which represent their positions in the alphabetical series: a = 1, b = 2, c = 3, d = 4, e =5, f = 6, g = 7, h = 8, i = 9, k = 10, l = 11, m = 12, n = 13, o = 14, p = 15, q = 16, r = 17, s = 18, t = 19, u = 20, w = 21, x = 22, y = 23, z = 24.

These operations are considered as performed on the basis of either the 21 or the 20 letter alphabet.

If the result of an operation is a number greater than 21 (on the basis of the 21 letter alphabet), the corresponding letter may be found by subtracting that multiple of 21 which brings the result into the range of numbers from 1 to 21 inclusive.

If the result of an operation is a number less than 1, the corresponding letter may be found by adding that multiple of 21 which brings the result into the range of numbers from 1 to 21 inclusive.

The same remarks apply to operations performed on the basis of the 20 letter alphabet, with the variant hypothesis (which I entertain at present) that the letter w in the manifest text may correspond to either 14 or 20, and that the letter y may correspond to 2.

ILLUSTRATIONS

c+d=g	p+q=k	m−c=i	f−m=p
3+4=7	15+16=31,−21=10	12−3=9	6−12=−6,+21=15
c×d=m	p×r=c	c^2=i	q^2=d
3×4=12	15×17=255,−252=3	3^2=9	16^2=256,−252=4

The operation of division gives two integral results, either the integral part of the quotient or the remainder. In so far as I know, the letter represented by the operation of division is the letter corresponding to the remainder.

Though the operation of root extraction may likewise be said to give two integral results, either the integral part of the root or the remainder, I have so far discovered no evidence of Bacon's having used the operation.

COMPLEMENTARY ALPHABETS

In addition to the sums, differences, products, and powers of letters given by these operations, and the results of combining the digits of certain dates, or other numbers, with the letters of the alphabet, usually by addition or subtraction, a form of complementing letters is used by which both on the 21 letter basis and the 20 letter basis, a = u, b = t, c = s, d = r, e = q, f = p, g = o, h = n, i = m, k = l, l = k, m = i, n = h, o = g, p = f, q = e, r = d, s = c, t = b, u = a. A further develop-

ment of this idea is an alphabet produced by multiplying each letter by its complement (on the 20 letter basis only), thus: a = a × u = u, b = b × t = s, c = c × s = o, d = d × r = h, e = e × q = u, f = f × p = k, g = g × o = s, h = h × n = d, i = i × m = h, k = k × l = k, l = l × k = k, m = m × i = h, n = n × h = d, o = o × g = s, p = p × f = k, q = q × e = u, r = r × d = h, s = s × c = o, t = t × b = s, u = u × a = u.

Another device that Bacon employs during a certain portion of the cryptographic journey is to replace *n* by *u* or *u* by *n* whenever either of these letters occurs as the result of an arithmetical operation.

In connection with the use of the 20 letter alphabet I have performed this operation directly upon the letters as they appear in the manifest text, and after every arithmetical operation thereafter. As an alternative hypothesis, I consider leaving the *u*'s and *n*'s of the manifest text unaltered, but performing the operation of altering after every arithmetical operation as before.

TRANSPOSITIONS OF THE ALPHABET OF 20 LETTERS

It is my present hypothesis, which remains to be tested, that the alphabet of 20 letters is also to be transposed; and that the method of transposition in the 20 letter alphabet is different from the method of transposition in the alphabet of 21 letters.

In accordance with this hypothesis, the alphabet of 20 letters is first to be divided into two parts, the first part containing the first seven letters and the second part containing the remaining thirteen letters. The first part is to be transposed, both forward and backward, by ten, like the first part of the 21 letter alphabet; and the second part is to be transposed by eleven, both forward and backward. The two alphabets which result appear as follows:

A B C D E F G H I K L M N O P Q R S T U
d e f g a b c t u h i k l m n o p q r s
A B C D E F G H I K L M N O P Q R S T U
e f g a b c d k l m n o p q r s t u h i

The transposition by ten in the group of seven letters is intended to correspond to the adjustment to the sun, as involving the omission of ten days in the Gregorian Reformation; and the transposition by eleven in the group of thirteen letters is intended to correspond to a calendrical adjustment to the moon, as involving the difference of eleven days between the solar year and the lunar year.

PATTERNS

A Pattern is a representation of the positions occupied by letters to be selected from the total text for the purpose of creating a cryptographic spelling.

THE HEPTADIC PATTERN

The Heptadic Pattern is a representation of the positions occupied by cryptographic letters in seven consecutive columns considered as corresponding respectively to the seven days of a week.

The exact number of letters indicated by the Heptadic Pattern in seven consecutive columns is ten. In accordance with a process of addition, these ten letters are subsequently reduced to seven.

Corresponding to the fact that it involves a one to one correspondence with seven consecutive columns, the simplest representation of the Heptadic Pattern may be made in the form of the seven consecutive letters: A, B, C, D, E, F, G, in which these letters correspond respectively to the positions (by columns) of the cryptographic letters to be selected from the seven consecutive columns to which the pattern applies.

The seven letters used in the representation of the Heptadic Pattern are the seven Ephemeral Letters, which are assigned by cyclic permutation to the consecutive days of the year for the purpose of representing the serial position of Sunday by the position of the Dominical Letter.

Considered as an identical unit, the Heptadic Pattern may be represented in seven different forms obtained by cyclic permutation. Each of these forms corresponds to the period of a week as beginning with a different day of the week.

Represented by the seven letters: A, B, C, D, E, F, G, the seven forms of the Heptadic Pattern, as obtained by cyclic permutation, appear as follows:

A Form: A, B, C, D, E, F, G
B Form: B, C, D, E, F, G, A
C Form: C, D, E, F, G, A, B
D Form: D, E, F, G, A, B, C
E Form: E, F, G, A, B, C, D
F Form: F, G, A, B, C, D, E
G Form: G, A, B, C, D, E, F

As corresponding to the distinction between Old Style and New Style, the seven Forms of the Heptadic Pattern, as obtained by cyclic permutation,

are associated with the Ephemeral Letters in two distinct series, which may be illustrated as follows:

If the seven successive positions (by columns) of the Heptadic Pattern be numbered 1, 2, 3, 4, 5, 6, 7, and if these positions correspond respectively to the Ephemeral Letters, E, F, G, A, B, C, D, Old Style, they will correspond respectively to the Ephemeral Letters, A, B, C, D, E, F, G, New Style. Thus the position (by column) with which a particular Ephemeral Letter is associated in the Old Style form of the pattern is the fourth position to the left of the position with which the same letter is associated in the New Style form of the pattern.

In addition to being represented in seven different positions, the Heptadic Pattern may be represented in each of its seven positions in four different Orientations, obtained as follows: (1) the Normal Orientation, as the positions of the letters in the columns are originally designated; (2) the Inverted Orientation, where lines counted from the tops of the columns in the Normal Orientation are counted from the bottoms, and vice versa; (3) the Reflected Orientation, where letters counted from the beginnings of the lines are counted from the ends, and vice versa; and (4) the Rotated Orientation, where both the lines counted from the tops of the columns are counted from the bottoms and the letters counted from the beginnings of the lines are counted from the ends, and vice versa.

AUGMENTATION

The letters obtained by the use of the Heptadic Pattern are submitted, at a certain stage, to an operation which I shall call Augmentation.

By the operation of Augmentation, the letters obtained by the use of the Heptadic Pattern in the Normal Orientation in one group of seven columns are paired with and added to the letters of the Normal Orientation in the next group of seven columns. This sum may be called the Augmented Normal.

To the letters of the Normal Orientation of each succeeding group of seven columns is added the Augmented Normal of the group preceding; and the Augmented Normal thus obtained in each group is added to the letters of the other three Orientations of the same group.

The form of Augmentation here described applies to the construction of the cryptographic chess boards. In the structure which I have called the Cryptographic Lock appears a somewhat different form of augmentation, in which the Augmented Normal, as described above, is increased, in each of a series of groups of seven columns, by the repeated addition of the letters of the Normal Orientation of a single group of seven columns considered as corresponding, in the figure of the lock, to the figure of the bolt.

REPRESENTATION OF DATES AND SPELLINGS BY THE EPHEMERAL LETTERS

The seven Ephemeral Letters, as corresponding to the seven letters indicated by the Heptadic Pattern, are submitted to various operations by which they are reduced to representations either of various dates or of various spellings.

The operations to which the Ephemeral Letters are thus submitted are identical with operations to be performed on the letters selected from the text by the use of the Heptadic Pattern as corresponding to the Ephemeral Letters.

In the representation of dates by the Ephemeral Letters, the Ephemeral Letters are considered respectively as representing the digits corresponding to their values.

DECEMBER 12, 1572

December 12, 1572, is the date, Old Style, of the birth of Bacon's son. This date is represented by the Ephemeral Letters in the following order: FDCBGEA.

In the representation of this date by the Ephemeral Letters, the year, 1572, is represented by the letters to which the digits correspond: AEGB; and the day is represented by the letters CDF, as corresponding to 346, the number of December 12 in the annual series of days, New Style. As thus representing both the year and the day, AEGBCDF is read as a palindrome: FDCBGEA.

This representation of the birthday of Bacon's son is used in connection with the G Pattern, as the form of the pattern which corresponds to the son in accordance with the calendrical symbolism.

JANUARY 13, 1527

January 13, 1527, is the date, Old Style, of the birth of Bacon's mother. This date is represented by the Ephemeral Letters in the following order: FDCGBEA.

In the representation of this date, the year, 1527, is represented by the letters to which the digits correspond: AEBG; and the day, the 13th of the year, is represented by the letters CDF, as corresponding to 13 in the form of their sum: C + D + F = 13. As thus representing both the year and the day, AEBGCDF is read as a palindrome: FDCGBEA.

This representation of the birthday of Bacon's mother is used in connection with the E Pattern, as the form of the pattern which corresponds to the mother in accordance with the calendrical symbolism.

OCTOBER 13, 1453

October 13, 1453, is the date, Old Style, of the birth of Bacon's ancestor, Edward Prince of Wales, son of Henry VI. This date is represented by the Ephemeral Letters in the following order: FGBCEDA.

In this representation of the date, the year, 1453, is represented by the letters to which the digits correspond: ADEC; and the day is represented by the letters BGF, as corresponding, New Style, to the 276th day of the year. It is possible that this representation of October 13, Old Style, which is the 286th day of the year, by letters corresponding to 276, the number of October 3, involves a discrepancy which Bacon was unable to avoid in terms of the general system which he had adopted. I believe, however, that Bacon intended the apparent discrepancy to be explainable in terms of the fact that Edward was born on the Festival of St. Edward, which occurs on October 13, New Style, as well as October 13, Old Style. Thus the actual date by which the Festival of St. Edward, New Style, may be represented Old Style is October 3, or the 276th day of the year; and the same number may accordingly be used to designate the birthday of Prince Henry if his birthday and the date of the Festival of St. Edward, New Style, are identified.

Another justification of Bacon's representation of the 286th day by the number 276 may possibly be found in considering 276 as the number of October 13 in the year of the Reformation, 1582, from which ten days had been omitted.

As thus representing both the year and the day, ADECBGF is read as a palindrome: FGBCEDA.

This representation of the birthday of Bacon's ancestor is used in connection with the A Pattern, as the form of the pattern which corresponds to the father in accordance with the calendrical symbolism.

TETRADISING

The seven Ephemeral Letters, as associated with the seven positions of the Heptadic Pattern, are to be reduced, at various stages of the cryptographic journey, to various combinations of fewer letters. The process by which they are so reduced in number involves submitting the letters, as equated with their values, to various operations of addition, multiplication, and division. The purpose of thus reducing the seven letters to combinations of fewer letters is to represent various spellings. By the process of TETRADISING, as I shall call it, the seven letters are reduced to four letters.

My first clue to the tetradising of the seven Ephemeral Letters is discoverable in the form in which a zero, to be considered as the equivalent of the letter O, is associated with the letter E in the original form of the Heptadic Pattern, as it appears in columns 2097-2103:

F G A B C D E (O)

D. BACON

As a result of the association of the letter E with the letter O in this form of the Heptadic Pattern, the seven Ephemeral Letters may be reduced to the six letter spelling: D. BACON, in which D. = Dominus. The first four letters of the spelling: D. BAC, appear in the original form of the Ephemeral Letters; the O appears in the form of the association of O with E; and the N appears in the form of the sum of F + G = N.

BUTTS

As a further result of the association of the letter E with the letter O, the seven Ephemeral Letters may also be reduced to the five letter spelling: BUTTS. This spelling involves an alphabetical substitution which I have defined elsewhere as the Complementary Alphabet, in which the manifest letter represents the letter corrsponding to the difference between the number of the manifest letter and 21, the number of letters to which the original alphabet of 24 letters is first reduced in connection with the substitutions based on the transpositions of the Ephemeral Letters in the Gregorian Reformation.

For the spelling of BUTTS to which the Ephemeral Letters may be reduced, the following operations must be performed.

First, take the Ephemeral Letters A, B, C, in their original forms. Second, add together the two associated letters, E and O, obtaining T. Third, take the remainder, B, as obtained by dividing the product of F and G by D.

As a result of the foregoing operations, the Ephemeral Letters are reduced to the following letters: A, B, C, T, B. The complements of these letters are: U, T, S, B, T, which, when anagrammatised, spell BUTTS.

An alternative method of reducing the seven Ephemeral Letters A B C D E F G, to the five letter spelling BUTTS is to combine by subtraction the letters D and F and the letters G and E to obtain the letters T and B (D − F = T, G − E = B). The complements of the five letters A B C T B thus obtained, are the five letters U T S B T, which anagrammatise into the spelling: BUTTS.

PAGE

The original form in which the Ephemeral Letters are to be tetradised appears in the spelling PAGE. For the purpose of creating this spelling, the letters A, G, E, are taken from the original form of the Ephemeral Letters, and the letter P is obtained as the sum of the remaining Ephemeral Letters, B + C + D + F = P.

I FRY

The spelling: I FRY, signifying either I FREE or I, COOK, as a pun for the maiden name of Bacon's mother, is obtained from the Ephemeral Letters by the following operations, in which, as contrasted with the anagrammatic arrangements required for the earlier spellings, the letters are combined in an order that appears by cyclic permutation: I = E + D; F = F; R, as 17 in the reversed form 71, = G + A; Y, as 23, = B + C.

THE GODDESS FORM

Involving an analogy with the tetradic PAGE, in the sense that the letters to be combined for the representation of another letter are in both instances the same, the Ephemeral Letters are again to be tetradised as PGEA, as corresponding to a form intended to correlate the spelling PAGE with a spelling intended to identify Anne Cooke with GEA, as the divine mother. This identification is to be understood as expressed by the Ephemeral Letters in the following order: D, F, C, B, G, E, A. The last three letters spell the name of the divine mother in Greek mythology: GEA; and the first four letters, when represented by their numerical equivalents, 4632, represent the name of ANNE COOKE by the method of juxtaposed value-sums, in the sense that 46 is the value-sum of COOKE and 32 is the value-sum of ANNE.

TETRADIC FORMS OF DATES

The Tetradic form of FDCBGEA, as representing the filial date: December 12, 1572, is: (F + D + C + B) GEA.

The Tetradic form of FDCGBEA, as representing the maternal date: January 13, 1527, is: (F + D + C + G) BEA.

The Tetradic form of FGBCEDA, as representing the paternal date: October 13, 1453, is: (F + G + B + C) EDA.

SYMBOLIC USE OF DATES

What gave me my first clue to the use that Bacon makes of the method of simple transliteration was his choice of the date 1597 for his first publication, the first edition of the *Essays*. The fact that the date has a cryptographic significance is hinted not only in the form of obscure allusions in the text but also by the fact that it appears in the little volume, of exactly 100 pages, five times.

At the conclusion of the *Epistle Dedicatorie* the date is thus specified both as to the year and as to the day of the month:

From my Chamber at Graies Inne this 30. of Ianuarie. 1597.

In the date, as thus given, the day of the month, as well as the year, has a cryptographic significance. In the annual series of days, Old Style,

January 30 is 312, a number which may be read as a palindrome, by the method of simple transliteration: BAC. As thus read, the day is intended by Bacon as a cryptographic allusion to his name, as Bacon, in the form of its first syllable.

An analogous use of a day of the month to allude to the name of Bacon appears in the use made of November 8 as the date, 1623, of the license to publish the previously unpublished plays in the first Shakespeare *Folio*, as recorded in the Stationers' Register. The number of November 8 in the annual series, New Style, is also 312. The fact of an intention to allude to the name of Bacon in the date of the license for the previously unpublished plays of the *Folio* may further be understood in the possibility of the anagrammatic acrostic on the consecutive forms: 1623, November: F. BACON.

Let us now return to the question of the cryptographic significance of the date of the *Essays*, as I597. If the digits of this date are thus divided: 15, 9, 7, they may be read: PIG, as an allusion to the name of Bacon.

The spelling PIG is far from exhausting, however, the meaning which Bacon intended the date of the *Essays* to express. In order to complete the interpretation, it is necessary to observe that the digit 1 is represented by the letter I, so that 1 is represented by a letter which has the value of 9. The use to which Bacon puts this variability in the representation of dates is of great importance.

In accordance with the use of the letter I, as having the value 9, for the digit 1, 9 = either 9 or 1, as signifying either I or A.

By analogy with this variability of 9 as 1, the date, as printed in the *Essays*: I597, may be read as follows:

(1) 9597
(2) 1597
(3) 9517
(4) 1517

If the form (4) 1517 be divided as follows: 15, 1, 7, it may be read: PAG. Thus read, PAG may be understood as an allusion to the name of PAGET, just as PIG, as read from 1597, may be understood as an allusion to the name of Bacon.

Moreover, when 1517, considered as a possible representation of 1597, is divided as follows: 1, 5, 17, it may be transliterated AER; and it is in the sense that this spelling may be understood to represent the date of the publication of the first edition of the *Essays* that it is necessary to consider the reference to *Mollis Aer* in the interpretation of the *Oracle* in *Cymbeline*.

In addition to the spellings PIG and PAG, the date 1597, in the form of an anagram: 5, 9, 17, may be read: EIR (heir).

The date 1597, which may thus be understood to involve an association of the words PIG (Bacon), PAG (Paget), and EIR (heir), appears in a book

which is so constructed, as I have shown in *The Shakespearean Mystery*, as to suggest, in the form of various other cryptographic devices, both the name of Bacon and the symbolism of the Apocalyptic Book of the Seven Seals, so that Bacon is associated with the symbolism of the divine Word, as the divine Son. It is in accordance with this symbolism that the date 1597, as signifying PIG, is to be understood as the Word (1597) made flesh (PIG).

Thus understood as involving an allusion to the Word made flesh and as associated with the spellings PIG (Bacon), PAG (Paget), and EIR (heir), the date 1597 is intended to be related, as involving various associations, with the date 1549.

The intended associations with the date 1549 may be summarised as follows:

(1) By the method of simple transliteration, 1549 may be read, as a palindrome: IDEA. This IDEA is intended to be understood as referring to the form of the divine Mind, as the form of the Word that was made flesh in 1597; and the period intervening between 1549 and 1597 is intended to be understood as analogous to the period, like the pregnancy period of the Immaculate Conception, which intervened between the time when the Word existed in the divine Mind and the birth of the Word Incarnate.

(2) In the sense that the date 1549 is thus associated with the divine IDEA, it is associated with the following event, as analogous to the form in which the divine IDEA appeared in the Protestant Reformation in England: the publication, in 1549, of the first edition of the English Prayer Book.

(3) Also to be associated with the date 1549, in accordance with Bacon's intention, is the patent of nobility conferred upon Sir William Paget, when, on December 3, 1549, he was created Baron Paget of Beaudesert. It is in the form of this association that Bacon intends to allude to the adoption of his son into the family of the Pagets of Beaudesert, just as a similar allusion is intended in the possibility of associating the names of Bacon (PIG) and Paget (PAG) in the form of the date 1597.

The exact period, in the form of the exact number of days, between December 3, 1549, the date of the creation of Sir William Paget as Baron of Beaudesert, and January 30, 1597, the date attached to the *Epistle Dedicatorie* of the first edition of the *Essays*, is put to an important use in tracing the cryptographic course of the Magic Ring.

Analogous to the relation, as thus defined, which Bacon intended to be understood between 1597, the date of the first publication to bear his name, as Francis Bacon, and 1549, is the relation which he intended to be understood between 1593, the date of *Venus and Adonis*, the first publication to bear the name of William Shakespeare, and 1594, the date of *Lucrece*, the second publication to bear the name of William Shakespeare.

Divided as 15, 9, 3, the date of *Venus and Adonis*, may be read: PIC, a spelling which may be understood, in connection with the poetical treatment

of the myth of a Boar, as PIG in the form of the early spelling: *picga.* In the sense therefore that they may both be understood to involve a spelling of PIG, as an allusion to the name of Bacon, an analogy is suggested between the dates 1593, as appearing in the first publication by William Shakespeare, and 1597, as appearing in the first publication by Francis Bacon.

Divided as 1, 5, 9, 4, and reordered as an anagram, the date of *Lucrece* may be read: IDEA. In the sense therefore that the spelling IDEA may be understood in both, an analogy is suggested between the date 1594, as appearing on the second publication by William Shakespeare, and 1549, the date of the publication of the first edition of the Prayer Book, of an early authorised edition of the Bible in English, and of the patent of nobility of William Paget, first Baron of Beaudesert.

In the sense that 1594, the date of *Lucrece,* is intended as an anagram for 1549, the date of the creation of the Barony of Beaudesert and of the publication of the first edition of the Prayer Book, 1593, the date of *Venus and Adonis,* is intended as an anagram for 1539, the date of the publication of the first edition of the first authorised version in English of the Bible.

Like the period between 1549 and 1597, the period between 1594 and 1593 is intended to be understood as analogous to the period between the conception of the Word, as Idea, and its birth, as Flesh (PIG). It is to be observed, however, that the IDEA, as 1549, advances in time to the Incarnation, as PIG, in 1597, whereas there is a retrogression, as involving rebirth, from the IDEA, as 1594, to the Incarnation as PIC, in 1593. The complete relation between the two periods involves, I believe, the symbolism of the doctrine of Adoptianism, in accordance with which the Incarnation implies two forms of birth, both as God and as man.

Just as Bacon makes an important use, in the construction of his cryptographic journey, of the exact number of days between December 3, 1549, and January 30, 1597, he at the same time, in accordance with the analogy which he intends the two periods to express, makes an important use of the exact number of days between the dates on which *Venus and Adonis* and *Lucrece* were entered in the Stationers' Register: April 18, Old Style, 1593, and May 9, Old Style, 1594.

For the complete interpretation of the use to which Bacon puts the date of *Lucrece,* it is necessary to read it both as 1594 and as I594. In the latter form it may be transliterated as IEID, which may be read by cyclic permutation: I DIE. This meaning is the clue to the use of the date as a Seal in connection with the manifest cryptogram in *Twelfe Night:*

M. O. A. I.

An allusion to this date as a Seal appears in the context of the breaking of the seal of the anonymous letter in which the cryptogram M. O. A. I. is contained:

Mal. By my life this is my Ladies hand: these bee her very *C's.* her *U's,* and her *T's,* and thus makes shee het great *P's.* It is in contempt of question her hand.

An. Her *C's,* her *U's,* and her *T's*: why that?

Mal. To the vnknowne belou'd, this, and my good Wishes: Her very Phrases: By your leaue wax. Soft, and the impressure her *Lucrece,* with which she vses to seale: tis my Lady: To whom should this be?

Fab. This winnes him, Liuer and all.

Mal. Ioue knowes I loue, but who, Lips do not mooue, no man must know. No man must know. What followes? The numbers alter'd: No man must know,
If this should be thee *Maluolio?*

To. Marrie hang thee brocke.

Mal. I may command where I adore, but silence like a Lucresse knife:
With bloodlesse stroke my heart doth gore, M. O. A. I. doth sway my life.

Fa. A fustian riddle.

In accordance with this allusion to *Lucrece* as a seal in which the date, 1594, may be read: I DIE, the cryptographic spellings: CUT, P, and M. O. A. I., in the anonymous letter are intended to indicate the day of the month on which, in fulfillment of a prearranged pact, Bacon intended to die.

The month is indicated in the anagrammatic form of M. O. A. I. as MAIO (May).

The date of the month is indicated by the "great *P*", in the sense that P = 15. This P (15) is a great P in the sense that it is the 15th of May, New Style, being raised by 10 from 5, the day of the month Old Style.

The cryptographic CUT, like the subsequent allusion to "knife", alludes to the death as involving a wound.

In alluding thus to the time of his death in fulfillment of a pact, Bacon indicates not only the day of the month, as May 15, but also the year, as 1631.

The fact, in the first place, that an allusion to death is intended appears not only in the references to life and death in the context, but also in the extraordinary use, at the end of the scene, of the words:

Finis Actus secundus.

This unusual reference to an end (FIN) may be understood to indicate the year of the death in the sense that 1631, when printed I631, may be read backward by cyclic permutation: FIN.

The intention to indicate the year 1631 in the form of the spelling FIN as part of the spelling "Finis" is confirmed by the mispagination on the

next page: 273 for 265. If the two erroneous digits, 73, are read in reverse order, as 37, and added to the date of the seal: 1594, they yield, in relation to a date that spells: I DIE, the date 1631.

Moreover, the reference to the seal is on the page numbered 263. If the reference, on the same page, to CUT be considered in connection with this number, the year of the pretended death, as in 1626, may be understood in the first two digits: 26; and the year 1631 may be indicated if the first digit, 2, is CUT into two digits 1 and if these two digits 1 are then placed on each side of the remaining digits 63: 1631.

In addition to its meaning as a form of allusion to the time of Bacon's death, the manifest cryptogram M. O. A. I. is intended to express several other meanings.

(1) As I have shown in earlier publications, M. O. A. I. is intended to be understood as an anagram IAMO (IAMON), Spanish for "a Gammon of Bacon".

(2) As the anagram IAMO, it is also to be understood as: I AM CIPHER.

(3) If the letters M. O. A. I. be represented by their values, 12, 0, 1, 9, and if these digits be then grouped as follows: 12, 0, 19, they may be read: MOT, French for *word*; and this spelling may be understood as the WORD, in the sense of the Logos, which is made flesh (IAMON for Bacon) in the Incarnation.

(4) The transliteration of M. O. A. I., as 12, 0, 1, 9, may be read by cyclical permutation: 2191 CIPHER, and may so be understood to refer to the use which Bacon makes in his cryptographic structure of the calendrical symbolism of the six days of the divine works of creation, as containing 2191 days (the number of days in six years as including a Leap Year Day).

(5) In the form of M. O. A. I. Bacon intends, as I further believe, to suggest the spelling MOAB as the means of suggesting the incest symbolism with which the name of Moab is associated in the Bible.

In connection with the allusion to his death in the reference to the seal of Lucrece in the context of the manifest cryptogram M. O. A. I. are to be understood allusions to his son as his heir. These allusions are intended (a) in the printed number of the page on which the seal is mentioned: 263, the number of the day in the Old Style year corresponding to December 12, the birthday of his son, Old Style, and (b) in the printed number of the next following mispaginated page, 273, the number of the day in the Old Style year corresponding to December 22, the birthday of his son, New Style. These allusions are confirmed both by the title and by the general symbolism of *Twelfe Night* as alluding to the symbolism of the divine son and heir in relation to the festival of Epiphany as occurring on the twelfth day after Christmas. A reference to the actual birthday, December 12, appears in the words of Sir Toby: *"O the twelfe day of December"*.

SYMBOLISM OF THE TEN OMITTED DAYS

Of fundamental importance in the cryptographic structure which Bacon rears on the symbolism of the Gregorian Reformation of the calendar is the significance which he attaches to the period of ten days omitted in October, 1582, for the purpose of changing the calendrical position of the vernal Equinox from March 11 to March 21. The ten days thus omitted were October 5, 6, 7, 8, 9, 10, 11, 12, 13, 14.

Considered as a whole, the period of the ten omitted days serves as a symbol (1) of death, in the form of the grave, Hell, and the entrance to Hell, and (2) of the womb. It is a symbol of death, as the grave or Hell, in the sense that it is a period, in respect to the calendar, of non-existence; and it is a symbol of the womb in the sense that it subsequently, in the New Style form of the calendar, brings its non-existent days into existence. And in the further sense that the non-existent days which it brings into existence had previously existed in the Old Style form of the calendar, it is a symbol of rebirth.

In his use of the period of the ten omitted days as a symbol of death, as the grave or Hell, of the womb, and of rebirth, Bacon makes use of the fact that the number of any day in the monthly series Old Style is necessarily, as a result of the omission, ten less than the number of the same day New Style. Thus October 3, Old Style, is October 13, New Style; October 13, Old Style, is October 23, New Style.

The symbolism of the ten omitted days, as thus defined, is equated by Bacon with the symbolism of the myth of the Golden Bough, especially in the form in which the myth is adapted by Virgil to the account of the descent of Aeneas into Hell for the purpose of conversing with his dead father. In accordance with this account, Aeneas is enabled, by virtue of his finding of the Golden Bough, to descend into Hell, to converse with his father, and to return again, after the father has conducted him back to the gate of Hell, back to the life on earth. This return to earth is equated with rebirth, (1) in the sense that Aeneas is reborn; and (2) in the sense that, as a result of the meeting of father and son, so that father and son may be understood to be identified, the rebirth of the son involves the rebirth of the father.

For the purpose of referring the symbolism of rebirth, as involved in his use of the period of the ten omitted days, to himself, Bacon represents himself in the form of a particular day. This day is October 23.

The sense in which October 23 is to be understood as referring to Bacon appears in the fact that its number in the annual series, Old Style, is 213, a number which may be understood to represent Bacon in the form in which it may be transliterated: BAC.

As a result of the omission of the ten days in 1582, the number of October 23 was reduced from 213 to 203, a number which may be transliterated BOC, or, as a palindrome, COB.

In a normal Old Style year, 203 is the number, not of October 23, but of October 13, a day which, in 1582, was one of the ten omitted days and was accordingly included in the period which Bacon uses as the symbol of death, as the grave and Hell.

The reduction of the number of his day, October 23, from 213 to 203, so that October 23 may be understood to be reduced to October 13, as one of the days in the infernal period of the ten omitted days, is equated by Bacon with his descent into Hell, both as involving his death and as involving the myth of the Golden Bough. In accordance with his use of this symbolism, the spelling BOC, as the transliteration of 203, may be understood to represent the form of Bacon in Hell, in the sense that BOC = BAKE = BACON. The same spelling is further to be understood as capable of an allusion to the symbolism of the Golden Bough in the sense that BOC = BOCE = BUSH. COB, as the palindrome of BOC, is to be understood to represent the form from which Bacon, as in the grave equated with the womb, is to be reborn, in the sense that COB may be equated with the ear of corn used as the symbol of rebirth in the Eleusinian Mysteries. COB is further to be understood as HORSE, as involving the possibility of an allusion to the Knight, called *Cheval* in French, in the cryptographic game of chess in which the journey of rebirth is represented in the form of the reentrant Knight's tour.

For the purpose of combining with this representation of his descent into Hell a representation of his meeting with his father, in an analogy with the meeting of Aeneas with Anchises in the Virgilian form of the myth of the Golden Bough, Bacon selects a particular day to represent his father, just as he selected a particular day to represent himself. This day is October 13.

The significance of October 13, as the form in which Bacon represents his father in an analogy with the Virgilian account of the meeting of Aeneas and Anchises in Hell appears in the fact that October 13, 1453, Old Style, was the birthday of Edward Prince of Wales, who represents the father of Bacon in the sense of being his ancestor.

In accordance with this representation of the father in the form of the birthday of the ancestor, Edward Prince of Wales, the representation of the father as dead corresponds to the sense in which October 13, as one of the ten days omitted in 1582, may be understood to be included in a period used as a symbol of non-existence (death, Hell, and the grave). And the meeting of father and son in Hell, as corresponding to the Virgilian account of the descent of Aeneas, corresponds to the fact that the number of October 13 in the annual series, 203, is identical with the number to which, by the omission of ten days in 1582, October 23, as representing the son, was reduced.

Completing the analogy with the Virgilian account of the myth of the Golden Bough, in which the meeting of father and son in Hell is followed

by the return, as rebirth, of the son to earth, the representation of the rebirth, as following the representation of the meeting of father and son in the form of the non-existent October 13, 1582, is intended to be understood in the sense that October 13, Old Style, was raised for the first time in 1583, New Style, to October 23, when the number of October 23 in the annual series, as beginning with March 25, was again 213. Thus the day by which Bacon represents himself, as in life, having first, as a symbol of death, been reduced in the annual series of days from 213 to 203, as corresponding to October 13, is raised again, as a symbol of rebirth, to 213, its original number. And in the sense that the form, October 13, from which Bacon is thus represented as reborn is identical with the form representing his ancestor, as father, the rebirth of the father is to be understood as represented in the rebirth of the son.

The symbolism, as thus suggested, which Bacon bases on the period of the ten days omitted in connection with the Gregorian Reformation, is an important clue to the cryptographic journey involved in the structure of the Magic Ring.

THE ORACLE IN CYMBELINE

The fact that the decipherer is to pursue, in the cryptographic text, a course analogous to the journey of life is suggested by the use which Bacon makes of the Virgilian account of the myth of the Golden Bough, in which, it will be remembered, Aeneas receives the instructions for his journey to hell and back again in the form of an oracular utterance.

In the sense that it contains a representation of the journey of life, the cryptographic text is a representation of the form of the universe, as the scene of the actual journey of life. Thus the form of the cryptographic text is the form of a Microcosm, in which the form of the Macrocosm is reproduced.

Corresponding to the oracular utterance in the Virgilian account of the myth of the Golden Bough is the oracular text which is twice printed, with exact identity of form, in *Cymbeline*. In respect to the cryptographic use to which it is put, the more important of these two appearances of the *Oracle* is the second, which appears on actual page 907, which is grossly misnumbered 993. The manifest allusion to the myth of the Golden Bough, as referring to a bough which must be plucked from a tree, appears in the allusion to the lopt branches of the Cedar.

In respect to its symbolism, the *Oracle* in *Cymbeline*, like the myth of the Golden Bough, involves the symbolism of the journey of life, a theogamy, and a birth (rebirth). The Cedar, as replacing the tree in the myth, has the following symbolism: it is a maternal symbol; it is the Sephirotic Tree, as a representation of the universe; it is the Tree of Time; and it is a genealogical tree.

For the complete interpretation of the *Oracle*, as the expression which furnishes the clue to the cryptographic journey, it is necessary to consider the various numbers which it may be understood to express by the method of simple transliteration.

First, the word ORACLE itself must be understood as a pun for OR A CLE (OR, or gold, A KEY). It is in this form of gold as OR that a further application of the symbolism of the Golden Bough is suggested.

In accordance with the punning sense, in Bacon's use of the word *Oracle*, of OR as a key, the spelling OR must be, (a) transliterated: 1417; and (b) related to the actual number of the page on which the *Oracle* appears for the second time in the Shakespeare *Folio:* 907. This number may be transliterated IOG, or, by reversal and cyclic permutation, I GO; and is intended accordingly to suggest the journey to be undertaken in quest of the Golden Bough (OR). The numbers thus associated, 1417 and 907, will prove to be important clues to the section of text, which I have named the Golden Section, in which the quest for the Golden Bough is first represented. This section contains exactly 1417 pages (thus repeating the 1417 of OR) which contain exactly 2324 columns, a number which may be transliterated as YZ and punned as YEZOD. The number of columns in the Golden Section in excess of the number of pages is exactly 907, thus repeating the actual number of the page on which the *Oracle* is printed.

For the further interpretation of the number 1417, as the transliteration of OR, it must be anagrammatised as 1471. In this form it is to be understood to allude to the date of the death, in 1471, of Edward Prince of Wales and the birth of his secret son.

In the light of the foregoing interpretation of the word ORACLE, it is now necessary to interpret the word CEDAR, as the form of tree to which the *Oracle* refers, in relation to its calendrical and genealogical symbolism.

The genealogical symbolism which the word CEDAR is intended to express appears in the form in which it may be understood to reproduce the dates of the birth and death of Edward Prince of Wales, 1453-1471. In accordance with common usage, these two dates may be represented as follows: 1453-71. When each of the two dates, as thus represented, is written as a palindrome, the digits appear in the following order: 3541-17; and these digits, in this order, may be read by the method of simple transliteration: CEDAR.

The word CEDAR, in the form of the transliteration:

354117

is also intended, as I have said, to express a calendrical symbolism, which appears when the complete number is divided in the middle: 354 and 117. The number of the first half, 354, is to be understood to represent a lunar year (the mother) in the sense that 354 is the number of days which a lunar

year contains. The number of the second half, when read as a palindrome, 711, is to be understood, in connection with the maternal representation, to represent the father and the son in the sense that 711 is the sum of the number of days in the paternal symbol of the solar year, 365, and the number of days in the filial symbol of the "eclipse year", 346, a number which is further to be understood as a symbol of the son in the sense that 346 is the serial number of the day of the birth of Bacon's son, December 12.

The calendrical symbolism of 117, as the second half of the transliteration of CEDAR, is further to be understood, in the anagrammatic form 171, to refer to the Gregorian Reformation in the sense that, counting backward from March 25 as the beginning of a year, Old Style, 171 is the serial number of October 5, the day at which, like the branches in the *Oracle,* the ten days of the calendar were lopt off.

PAGET, BUTTS, AND LANCASTER

Essential to the discovery of the cryptographic structure of the Magic Ring is the prior discovery of the form in which Bacon alludes to his relations with the families of Paget, Butts, and Lancaster.

An important, and fairly obvious, association of the names of Bacon and Paget appears in the "Hang-hog, is latten for Bacon" scene in *The Merry Wiues of Windsor,* in which William Page, the son of Mistris Page, is submitted to an examination. The use of this name in this scene is intended as an allusion to the name of Paget, as the name of the family of the Pagets of Beaudesert, in the vicinity of Lichfield. The intention of this allusion is confirmed by various allusions to Lichfield and also by the fact that the Christian names of the members of the Page family in *The Merry Wiues of Windsor* and the Christian names of members of the Paget family, Thomas, Anne, and William, are identical.

The fact that, in the "Hang-hog" scene, William Page is examined in the presence of his mother, who afterwards takes him home, is intended to allude to a peculiar relation between William Paget, fourth Baron of Beaudesert, and Lady Paget, his reputed mother. That this was the relation of an adopted, rather than of a natural son, is intended to be suggested by the sense in which Mistris Page is represented as adopting Robin, as a page sent to her by the Baconian figure of Falstaffe. The form in which the name Robin is abbreviated as Rob, is intended to suggest, in its palindromic form, a punning allusion to the name of Bacon as BOR (BOAR).

The intended association, in the "Hang-hog" scene, of the names of Bacon and Paget, is intended to include allusions to the name of Butts and to Edward Prince of Wales, son of Henry VI. Allusions to the name of Butts appear in the form in which Falstaffe is presented as the butt of a

practical joke; in the use of the word *butter*; and in the use, at the end of the second line of the second column of page numbered 53, of the word *but*, as included in an acrostic spelling BUTS. An allusion to Edward Prince of Wales appears in the fact that the number of the page on which the "Hang-hog" scene begins is 53, as printed in the pagination number, and 71 by actual count from the beginning of the *Folio*. These two numbers are intended to be understood respectively as the last two digits of dates in the fifteenth century, 1453 and 1471, Edward's birth and death dates.

In the light of the allusions, in *The Merry Wiues of Windsor*, to the name of Paget in the form of the name of Page, another allusion to the name of Paget is to be understood in the line in the inscription under the bust of the actor at Stratford:

LEAVES LIVING ART, BUT PAGE, TO SERVE HIS WITT.

The association, in this line, of the words *page* and *but* is intended to suggest an association of the names of Paget and Butts in connection with cryptographic allusions to the name of Bacon. The words *Leaves living* are intended as an allusion to the lineage by which Bacon was survived.

The intention to associate the names of Bacon, Paget, and Butts, as suggested in the Stratford inscription and the "Hang-hog" scene in *The Merry Wiues of Windsor*, is discoverable again, in a context of great importance, in the appearance of the name of Butts, as belonging to Sir William Butts, the physician of Henry the Eighth, in the manifest form of the text of *Henry the Eight*, Act V, Scene ii. As it appears in this play, the name is spelled in two forms: Buts and Butts. As counted in the section of *Histories*, the printed number of the page on which the spelling Buts first appears is 228. The actual number of the page in the *Folio* is 582. The spelling Butts first appears on actual page number 583.

As I have indicated in *The Shakespearean Mystery*, the first appearance of the name of Butts, in the spelling Buts, is on a page which contains, in the form of a manifestly false announcement of the birth of Queen Elizabeth, an allusion to the birth of Lady Bacon, the mother of Francis Bacon; and the printed number of the page, 228, is intended to allude to the date of her birth, New Style, as 1528, in the sense that the last two digits of the printed page number, 28, correspond to the number of the year in the century in which the reign celebrated in the play occurred.

In order to understand the full variety of the intended allusions, it is necessary, first of all, to recognise (a) that these allusions appear on pages which are intended to represent dates by the respective page numbers; and (b) that the pages on which the allusions appear are numbered according to two distinct series, (1) the series of printed page numbers, as belonging to the section of *Histories*, which is followed by a section of unnumbered

pages, whose numbers are to be considered as a continuation of the series of printed page numbers, and (2) the series of actual page numbers as counted from the beginning of the *Folio*. Thus, as I have already stated, the identical page which contains the first appearance of the name Butts (Buts) together with allusions to the birth of Lady Bacon has the printed number 228 and the actual number 582.

In the designation of dates by the printed page numbers or the continuation of the printed page numbers, the last two digits of the printed page number 228 correspond to the 28th year of the century in which the action of the play takes place. Thus 228 here corresponds to 1528; and, in counts from this page as corresponding to this date, any year before or thereafter may be indicated in terms of a one to one correspondence between years and pages, by pairing successive page numbers and years backward or forward from this point.

In the designation of dates by the actual page numbers, the last three digits of the actual number, 582, of the page with the printed number 228, correspond to the last three digits of 1582; and in the designation of any year before or thereafter, the actual page number corresponds to the number of the year after the year one thousand.

Thus, indicating the correspondence of actual page number 582 with printed page number 228 with year number 1528 by the continued equation, 582 = 228 = 1528, other correspondences of page numbers starting from this initial correspondence may be similarly indicated as 524 = 170 = 1470, 525 = 171 = 1471, and 563 = 209 = 1509; while correspondences of the page numbers obtained by continuing the printed page numbers into the unnumbered page section, may be indicated as 599 = 245 = 1545, 603 = 249 = 1549, 614 = 260 = 1560, 615 = 261 = 1561, 626 = 272 = 1572, and 637 = 283 = 1583.

Again, indicating the correspondence of the actual page number 582 with year number 1582 by the equation, 582 = 1582, other correspondences of actual page numbers starting from this initial correspondence may be similarly indicated as 470 = 1470, 471 = 1471, 527 = 1527, 528 = 1528, 545 = 1545, 549 = 1549, 560 = 1560, and 572 = 1572.

The association, in accordance with the methods described, of two dates, 1528 and 1582, with the page containing the first appearance of Buts is intended to indicate a cryptic association between the two events with which these dates are identified in the Baconian symbolism, the birth, in 1528, New Style, of Lady Bacon, and the initial change, in October, 1582, involved in the Gregorian Reformation.

Moreover, just as this page may be identified, on the basis of the printed page number, with 1528, the next page may be identified, on the basis of the actual number, with 1583, so that the two dates, 1528 and 1583, are represented as abutting, in a sense intended to indicate an abutment, or juxtaposi-

tion, of Lady Bacon, as represented by her birth date, and Sir William Butts, son of the physician, as represented by the date of his death, a date which is also to be understood (a) as the date of the succession of his son, Francis Bacon, to his royal rights, and (b) as the date of the inauguration of the reformed calendar.

It is in the light of the represented association of Lady Bacon and Sir William Butts that the allusions, on actual page 582, to the birth of Lady Bacon are to be understood in a punning sense as referring both to her own birth and to the birth of which she was the mother. This latter sense is hinted in the fact of the affirmative answer when Henry asks if the new-born child is a boy. The fact that this sense is suggested on a page that may be equated with a representation of 1582 is intended to suggest the use of that date, as referring to the Calendrical Reformation, as a maternal symbol, as contrasted with the paternal symbolism of 1583.

The fact that the son to whom the allusions apply is a royal pretender is hinted in the fact that the King is represented as looking at a prisoner through a window:

> *Enter the King, and Buts, at a Windowe aboue.*
>
> *Buts.* Ile shew your Grace the strangest sight.
> *King.* What's that *Buts?*

This passage is intended to suggest the presence of a royal pretender in terms of an analogy with the incident, recorded by Bacon in his *Historie of the Raigne of King Henry the Seuenth*, of Henry VII looking through a window at the royal pretender Perkin. The secret intention in Bacon's treatment of the history of Henry VII is to suggest the existence of a royal pretender descended from the House of Lancaster.

That the allusions to the birth of Lady Bacon, in the sense of referring to a birth of which she was the mother, are to be understood as referring not only to a son by Sir William Butts but also to a son identified with the Pagets, is expressed on the preceding page, with the printed page number 227. When 228 = 1528, 227 = 1527, which may be understood as the date, Old Style, of Lady Bacon's birth, just as 1528 was understood as the date of her birth, New Style. On this page (227), in connection with references to the queen as in labor, the identity of the child is hinted as a Paget in the form of allusions to the Pagets of Beaudesert. These allusions appear in the sense that a "Page" is associated with the Bishop of Winchester, by whom the original Sir William Paget, first Baron of Beaudesert, early in his career, was befriended and advanced; and also in the sense that the Pagets are designated in the manifest text by the first name of the reputed father, Thomas Paget, of the child to whom the allusions apply, and by the first name, Charles, of the brother of Thomas.

Confirmation of the intention to associate allusions to the family of Bacon, as suggested above, with pages that may be understood to represent the dates of the events to which the allusions refer may be found in the consistently continued use to which this form of association is put.

(1) Thus, when the printed page number 228, *Histories*, = 1528, date of the birth of Lady Bacon, then the printed page number 209, *Histories*, = 1509, date of the birth of her husband Sir Nicholas Bacon, reputed father of Francis Bacon. On the page with the printed number 209, *Henry the Eight*, there appears in the manifest form of the text the name *Nicholas* and the word *Father* twice, in the following suggestive context:

> The Part my Father meant to act . . .
> Th' Vsurper . . . . . .
> . . . . . .
> (As he made semblance . . . . . .

(2) When, again, the printed page number 228, *Histories*, = 1528, then page 599, actual count (page 245, printed page continuation count), corresponds to 1545, the date of the death of Sir William Butts, father of the father of Francis Bacon. An allusion to this "father", in the form of a pun on his name as "But", appears on this page in the following passage:

> But be as *Aiax.*
> *Aia.* Shall I call you Father?
> *Ulis.* I my good Sonne.

The allusion is confirmed by acrostic spellings and by an allusion to the profession of Sir William Butts in the form of a reference, on the preceding page, to a "Physitian".

(3) When, again, the printed page number 228, *Histories*, = 1528, then page 603, actual count (page 249, printed page continuation count), corresponds to 1549, the year in which Sir William Paget was created first Baron of Beaudesert. An allusion to this estate appears on this page in the form of the words:

> bone, desert in seruice.

(4) When, again, the printed page number 228, *Histories*, = 1528, then pages 614 and 615, actual count (pages 260 and 261, printed page continuation count), correspond respectively to the birth of Bacon, as 1560, Old Style, and 1561, New Style. An allusion to his birth, as illegitimate, is intended in the stage direction, on page 614:

> *Enter Bastard.*

An allusion to his birth, as a Butts, appears on page 615 in the question:

But heare you? heare you?

in connection with an acrostic spelling of the name and an appearance of the word "name" in the manifest text. The word *But,* as having a cryptic significance, is here featured in the sense of appearing in a line with a double use of question, and a double use of the word *heare,* as suggesting a pun for *heir.*

(5) When, again, the printed page number 228, *Histories,* = 1528, then page 626, actual count (page 272, printed page continuation count), corresponds to 1572, the birth of Bacon's son. An allusion to this event is intended on this page in the following passage:

Your pratling Nurse
Into a rapture lets her Baby crie,
While she chats him: the Kitchin *Malkin* Pinnes . . .

The word *Kitchin* is intended as a punning allusion to the name of the mother as Cook.

(6) When, again, the printed page number 228, *Histories,* = 1528, then page 637, actual count (page 283, printed page continuation count), corresponds to 1583, the date of the death of Sir William Butts, the father of Bacon. A corresponding allusion is intended in the first line of the page:

This Ladies Husband heere.

In the form of analogous associations of allusions and page numbers representing dates, Bacon expresses his pretention to descent, via the family of Butts, from the House of Lancaster.

When 582, actual page number, = 1582, then 528, actual page number, = 1528, date, New Style, of the birth of Lady Bacon. On this page appears the character of Anne Neville; and she is represented, in an action for which there is no historical basis, as at a time in her life when, according to the *Continuation of the Croyland Chronicle,* she had disguised herself as a "cook maid". Thus on a page which may be understood to represent the date, New Style, of the birth of Anne Cooke, there are allusions to a character who was both an Anne and a cook; and the historical character thus associated with allusions to the names of Lady Bacon, as Anne Cooke, is Anne Neville, widow of Edward Prince of Wales, son of Henry VI.

This cryptic association of the names of Anne Neville and Lady Bacon gives a curious echo to the fact that the first word on the first line of the enigmatic Northumberland Manuscript is *Nevill,* and that this word is immediately followed, on the same line, by the words: *Mr. ffrauncis Bacon.* Under

"Nevill", as if to associate the name with the idea of a divine (or royal) origin, are the word: "religio fons . . ."; and under "Mr. ffrauncis Bacon", as if to associate the name with the idea of unrecognised royal rights, are the words: "of Tribute or giving what is dew".

Before proceeding with the allusions to the House of Lancaster, I may note that when actual page number 528 = 1528, actual page number 527 = 1527, the date, Old Style, of the birth of Lady Bacon. On this page, in the first scene of *Richard the Third*, appears the repeated reference to the letter G as a manifest cryptogram. As I have explained in *The Shakespearean Mystery*, this reference appears in a context which involves allusions to Lady Bacon and York House, as the birthplace of Francis Bacon; and it is in the light of this context that the letter G is intended to signify the divine mother Ge, and to indicate a sense in which the divine mother and Lady Bacon, as the mother of Francis Bacon, are to be identified.

When actual page number 528 = 1528, actual page number 560 = 1560, the date, Old Style, of the birth of Francis Bacon. At the top of this page appear the following lines:

> Beyond thoughts Compasse, that former fabulous Storie
> Being now seene, possible enough, got credit
> That *Beuis* was beleeu'd.

It is in the form of these words, as associated with a representation of the date of his birth, that Bacon alludes to his birth as involving a "fabulous Storie" which is analogous to the legend of the life of Bevis of Hampton, in which the mother of Bevis marries a king after having had her child by a first husband, and conceals the identity of her child by having him adopted into the family of a knight. Analogies with this story are intended to be understood in respect to the child of Anne Neville by Edward Prince of Wales, in respect to Bacon himself, and in respect to his son.

As confirming the intention to allude to descent from Anne Neville and Edward Prince of Wales, the following correspondences may be noted:

(1) When printed page number 228 = 1528, printed page number 171 = 1471, the date of the battle of Tewkesbury, death of Prince Edward, and birth of his son. On this page are allusions to the end of the battle of Tewkesbury, to the death of Prince Edward, and also to the death of King Henry, as occurring in the same year. An allusion to the birth of a posthumous son to the murdered Prince is intended in the words which are apparrently assigned to King Edward but which are to be understood as if spoken by the Prince with the same name:

> let's away to London,
> And see our gentle Queene how well she fares,
> By this (I hope) she hath a Sonne for me.

The fact that these words are intended to indicate the birth of a posthumous son to Edward Prince of Wales and Anne Neville is confirmed by the following passage from *Richard the Third,* Act V, Scene iii:

> Good Angels guard thee from the Boares annoy,
> Liue, and beget a happy race of Kings,
> *Edwards* vnhappy Sonnes, do bid thee flourish.
> *Enter the Ghost of Anne, his Wife.*

In accordance with the literal sense of the last two lines, as contrasted with the sense imposed upon them by the manifest form of the total context, there are here mentioned the sons of an Edward whose wife was Anne Neville. The Edward thus designated is accordingly, of necessity, not King Edward, but Edward Prince of Wales; and it is in the light of the cryptic character of this allusion that the reference to the Boare is to be understood as a punning allusion to the name of Bacon.

(2) Again, when printed page number 228 = 1528, printed page number 170 = 1470, the date of the marriage of Prince Edward and Anne Neville, dated by Bacon as identical with the marriage proposal on the 15th of July, Old Style, 1470. On this page an allusion to the marriage may be understood in the word "Marry", on the second line from the bottom in a scene in which the Prince and his mother appear.

Another association of this marriage with its date appears on page 470, actual count, considered as corresponding to 1470. On this page the marriage of Edward and Anne is suggested by the references in the manifest form of the text to the marriage of Margaret, the mother of Edward.

On the next page, 471, actual count, as corresponding to 1471, the date of the birth of the secret son of Edward and Anne Neville, an allusion to this birth is to be understood in the references to the pregnancy of Joan of Arc.

That the various allusions to a descent from Edward Prince of Wales and Anne Neville are to be understood to involve an association with the Pagets is hinted on page 549, actual count, as corresponding to 1549, the year in which Sir William Paget was created Baron of Beaudesert and also the year in which the first edition of the English Prayer Book was published. I have already briefly discussed the use to which Bacon puts this date as the means of referring to the origin of the family into which his son was adopted. The form of this adoption was intended by Bacon to involve analogies with the theological doctrine of Adoptianism, in accordance with which the human form of the divine son is equated with the adoptive form of the son of Bacon (Butts) as a Paget. In the sense that the date itself may be transliterated as a palindrome for IDEA, and in the further sense that it is the date of the appearance of the divine Word in the form of the Prayer Book, this date may be

understood, in accordance with Bacon's intention, to involve a relation between the divine Mind (IDEA) and the divine Word (the Prayer Book) which is analogous to the Incarnation.

The fact that page 549, actual count, is intended to correspond to the date 1549, as the date of the publication of the first edition of the Prayer Book, is indicated by the reference to the Prayer Book in the line:

A Booke of Prayers on their pillow lay.

With the date represented by the page thus identified with the date of the creation of the family of the Pagets as Barons of Beaudesert, the text refers to Edward Prince of Wales and his mother, Queen Margaret, as the means of suggesting the secret association of the family of the Pagets and descendants of the House of Lancaster.

The appearance, in this connection, of Queen Margaret, has a duplicity which is revealed by the fact that she is represented as speaking at a time, long after she had been banished from England never to return, when she was already dead. The duplicity is hinted in her words:

Heere in these Confines slily haue I lurkt.

The purpose of the duplicity is to suggest a double identity, as referring both to Queen Margaret, mother of Prince Edward, and to Lady Margaret Butts, wife of Sir William Butts, the grandfather of Francis Bacon. In the form of this duplicity, a member of the House of Lancaster may be taken for a member of the Butts family, so that the two families may be understood to be represented as identical.

That the descendants of the House of Lancaster, as thus associated with the Paget and Butts families, are to be identified with descendants of Sir William Butts, physician to Henry the Eighth and grandfather of Francis Bacon, is hinted again on page 545, actual count, as corresponding to 1545, the date of the death of Sir William Butts.

In order to recognise the sense in which this page 545, actual count, as corresponding to 1545, alludes to an association of descendants of the families of Butts and Pagets, it will be necessary to recall the allusion to the death of Sir William Butts on page 599, actual number (page 245, printed page continuation number), as corresponding to 1545 when page 228, printed page number, *Histories*, corresponds to 1528.

With the date 1545 thus established as corresponding to the death of Sir William Butts, grandfather of Francis Bacon, page 545, actual number, which corresponds to the same date with the same significance, contains an

allusion to 1549 in the form of two references to the Prayer Book. These references read as follows:

(1) And looke you get a Prayer-Booke in your hand;

and

(2) And see a Booke of Prayer in his hand.

Confirming the intention to use these two references to the Prayer Book as the means of alluding to 1549, the year in which the first edition of the Prayer Book was published, is the use of the word IDEA, into which, as I have already indicated, the date 1549 may be transliterated, as a palindrome.

The line containing the cryptic word IDEA reads as follows:

Being the right *Idea* of your Father.

There is thus associated with the word IDEA, which is used by Bacon as the means of referring to the Pagets in the form of the date of the creation of their Barony, an allusion to a right Father who is at once associated with the Pagets and at the same time associated with the date 1545, as the means of applying to him the name of Butts. Thus the name of Butts is suggested as the right name of the father of the descendants of the Paget family; and it is in the form of this suggestion that Bacon intends to allude to the fact that his son, as a Butts, was adopted into the Paget family under the name of William Paget.

Confirmation of the intention to allude to William Paget, as thus adopted, appears in the form of cryptic allusions on page 572, actual count, as corresponding to 1572, the year of his birth. In the text of this page, as alluding to the sense in which he is represented both as royal and as illegitimate, the first line of the second column reads:

I am sorry my integrity shoul breed;

and a queen, who is secluded with her women at work (labor symbolism), is submitted to an examination as to the grounds she has given for divorce.

In the 1656 edition of Dugdale's *Warwickshire*, which is a cryptographic work intended to allude to the mystery of the Shakespearean authorship, the name of Shakespeare appears in a context intended to suggest an association with the names of Paget, Neville, and Butts.

First, for the allusion to the name of Paget. In the first column of page 518 are the first appearances of the name of Shakespeare, the first of all appearing in the inscription on the tomb of Anne Shakespeare, wife of

William Shakespeare. At the top of the second column of this page are the following lines:

The Epitaph upon the Earl of Totnes his Monument represented on the next page.
THOMAS STAFFORDUS *strenuus*

Consider in these lines the following acrostic letters:

T . . . . . .
. . . . . page
THOMAS . . . . . .

Read: THOMAS PAGET, name of the third Baron of Beaudesert, reputed father of William Paget, fourth Baron of Beaudesert. To be noted in connection with this acrostic spelling is the appearance, in the context, of the word STAFFORDUS, as an allusion to the name of the county in which Beaudesert is situated, in the immediate vicinity of Lichfield. To be associated with the allusion to Staffordshire in the word STAFFORDUS is the appearance of the word *Lichfield* on page 521, the page facing the cut of the monument.

Second, for the allusion to the name of Neville. The next page, on the reverse of which is the earliest illustration of the monument of William Shakespeare at Stratford, contains the name of "Nevill" in the text of the inscription in the upper right hand corner.

Third, for the allusion to the name of Butts. On page 520, on which the cut of the Stratford monument appears, the top line of text, under the head: *In the North Ile,* is composed of six names, the last four of which are:

Margaret William Anne William

These four names, considered as two pairs, are intended to allude to the name of Butts in the sense that Margaret was the given name of Lady Butts, Bacon's grandmother, William was the given name of Sir William Butts, Bacon's grandfather, Anne was the given name of Lady Bacon, Bacon's mother, and William was the given name of Sir William Butts, Bacon's father.

In referring, in the preceding examples, to various correspondences indicative of an intention, on the part of Bacon, to designate himself as the son of Sir William Butts; as a descendant of Edward Prince of Wales and Anne Neville; and as the father of a son who is known as Lord William Paget, fourth Baron of Beaudesert; I have confined myself to the rudimentary forms in which the existence of such an intention may first be suspected, as the only means of accounting for certain cryptic regularities which the

manifest form of the text at once embodies and conceals. The complete account of these regularities, as the means by which the intention to express this meaning may be confirmed, will involve not only a complete account of the steps by which I have already traced the cryptograhic structure of the Magic Ring, but also an account of the steps which I have still to take in reducing the cryptographic structure to the final form of the cryptographic spelling.

Melencolia by Albrecht Dürer

Melancholia by the Monogrammist F. B.

Melancholia by the Monogrammist A. C.

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